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# Getting Started with Programming

|  |  |
| --- | --- |
| 1 | "Jeffrey" |
| 2 | "Jeffrey".length |
| 3 | 3+4 |
| 4 | 3\*4 |
| 5 | Eggplant |
| 6 | // This is a comment that the computer will ignore.  // It is for your eyes only!  "cake".length\*9; |
| 7 |  |
| 8 | // Also try the Q&A forum to get help  // The link is up at the top!  confirm("I feel awesome");  confirm("I am ready to go");  confirm("Beam me up") |
| 9 | prompt("What is your name?");  prompt("What is Ubuntu") |
| 10 | "What is your name?".length; |
| 11 | if ("I'm coding like a champ".length >10)  {  true  } |
| 12 | console.log(2\*5);  console.log("Hello"); |
| 13 | //After you run the code, you should see true 4 times, and false 2 times.  //By using `console.log` at the start of each line,  //we are able to print 6 lines of output.  console.log(15!== 4);  console.log("Xiao Hui".length <122);  console.log("Goody Donaldson".length > 8);  console.log(8\*2==16);  console.log(15 === 4);  console.log("Catsburrow".length < 1); |
| 14 | console.log("You are good at math!");  console.log("Just letting you know: your program got to line 6"); |
| 15 | if ( 100 < 2 )  {  alert("Let's go down the first road!");  }  else  {  console.log("derp");    } |
| 16 | // Remember, the order and punctuation matter.  // If you get an error, check carefully, line by line.  // If you're really stuck, see the hint!  var correct = "true";  if (correct == "false"){  console.log("I am right");  }  else{  console.log ("I am wrong");  } |
| 17 | // The computer doesn't worry about extra spaces between words or brackets  // It just cares about the order of where things are placed  // and that you have used the right characters (){}[]"";  // For extra help, a program called a 'linter' is checking your code  // and will put a red 'x' next to the first line that contains errors  if (10 === 10){  console.log("You got a true!");  }  else {  console.log("You got a false!");  } |
| 18 | // This is an example of an if / else statement.  if (12 / 4 === "Ari".length) {  confirm("Will this run the first block?");  } else {  confirm("Or the second block?");  } |
| 19 | if ("Jon".length \* 2 / (2+1) === (10/5))  {  console.log("The answer makes sense!");  }  else {  console.log("Error Error Error");  } |
| 20 | // Below is an example of printing the remainder of 18/4 using modulo:  // console.log(18 % 4);  console.log(14 % 3);  console.log(99 % 8);  console.log(11 % 3); |
| 21 | //An example of an if/else statement with modulo in the condition  if( 7 % 2 ) {  console.log("The first number is even!");  } else {  console.log("The first number is odd!");  } |
| 22 | // Be careful with the substring's letter positions!  "wonderful day".substring(3,7); |
| 23 | // Use console.log( ) to print out the substrings.  // Here is an example of the 1st to 4th letter of "JavaScript":  // console.log("JavaScript".substring(0,4));  console.log("January".substring(0,3));  console.log("Melbourne is great".substring(0,12));  console.log("Hamburgers".substring(3,10)); |
| 24 | // To create a variable, we use only one equals sign  // But to check if two values are equal, we use 3 equal signs.  // declare your variable here:  var myAge = (17);  console.log(myAge); |
| 25 | // Declare a variable on line 3 called  // myCountry and give it a string value.  var myCountry = "";  // Use console.log to print out the length of the variable myCountry.  console.log(myCountry.length);  // Use console.log to print out the first three letters of myCountry.  console.log(myCountry.substring(0,3)); |
| 26 | // On line 2, declare a variable myName and give it your name.  var myName = "Jeffrey Duivenvoorden";  // On line 4, use console.log to print out the myName variable.  console.log(myName);  // On line 7, change the value of myName to be just the first 2  // letters of your name.  console.log(myName.substring(0,2));  // On line 9, use console.log to print out the myName variable.  console.log(myName); |
| 27 | // On line 2, write your first comment! It can be anything!  //my job  var myJob = "onkruid wieder";  console.log(myJob.length); |
| 28 | // Not sure where to begin? Check the Hint!  var herpes = "not herpes";  if (herpes == "not herpes"){  console.log("I finished my first course!");  }  else {  console.log("I should kill myself.");  } |

# Choose Your Own Adventure

|  |  |
| --- | --- |
| 1 | // Check if the user is ready to play!  confirm("Prepare your anus!") |
| 2 | // Check if the user is ready to play!  confirm("Prepare your anus!");  var age = prompt("What's your age?");  if (age<=17){  console.log("You are allowed to play, but i will not take responsibilty for your suicide");  }  else {  console.log("Porn")  } |
| 3 | // Check if the user is ready to play!  console.log("Snow White and Batman were hanging out at the bus stop, waiting to go to the shops. There was a sale on and both needed some new threads. You've never really liked Batman. You walk up to him."); |
| 4 | // Check if the user is ready to play!  confirm("Snow White and Batman were hanging out at the bus stop, waiting to go to the shops. There was a sale on and both needed some new threads. You've never really liked Batman. You walk up to him.");  console.log("Batman glares at you.");  var userAnswer = prompt("Are you feeling lucky, punk?"); |
| 5 | //Check if the user is ready to play!  confirm("Are you ready to play?");  var age = prompt("Whats your age?");  //var age = 18;  if (age >= 18) {  console.log("have fun!");  } else {  console.log("I am not resposible");  }  console.log("Snow White and Batman were hanging out at the bus stop, waiting to go to the shops. There was a sale on and both needed some new threads. You've never really liked Batman. You walk up to him.");  console.log("Batman glares at you.");  var userAnswer = prompt("Are you feeling lucky PUNK!???");  if (userAnswer === "yes"){  console.log("Batman hits you very hard. It's Batman and you're you! Of course Batman wins");  } else {  console.log("You did not say yes to feeling lucky. Good choice! You are a winner in the game of not getting beaten up by Batman.");  }  var feedback = prompt("hi! i would like some feedback on my game. sooooo what would you give it to an 1-10??");  if (feedback > 7)  {  console.log("This is just the beginning of my game empire. Stay tuned formore!");  }  else {  console.log("I slaved away at this game and you gave me that score?! The nerve! Just you wait!");  } |
| 6 | // Check if the user is ready to play!  confirm("Snow White and Batman were hanging out at the bus stop, waiting to go to the shops. There was a sale on and both needed some new threads. You've never really liked Batman. You walk up to him.");  console.log("Batman glares at you.");  var userAnswer = prompt("Are you feeling lucky, punk?");  if (userAnswer == "yes"){  console.log("Batman hits you very hard. It's Batman and you're you! Of course Batman wins!");  } else {  console.log("You did not say yes to feeling lucky. Good choice! You are a winner in the game of not getting beaten up by Batman.");  }  var feedback = prompt("Rate my game DAMNIT!");  if(feedback >8){  console.log("This is just the beginning of my game empire. Stay tuned for more!");  }  else {  "I slaved away at this game and you gave me that score?! The nerve! Just you wait!";  } |
| 7 | // Check if the user is ready to play!  confirm("Snow White and Batman were hanging out at the bus stop, waiting to go to the shops. There was a sale on and both needed some new threads. You've never really liked Batman. You walk up to him.");  console.log("Batman glares at you.");  var userAnswer = prompt("Are you feeling lucky, punk?");  if (userAnswer == "yes"){  console.log("Batman hits you very hard. It's Batman and you're you! Of course Batman wins!");  } else {  console.log("You did not say yes to feeling lucky. Good choice! You are a winner in the game of not getting beaten up by Batman.");  }  var feedback = prompt("Rate my game DAMNIT!");  if(feedback >8){  console.log("This is just the beginning of my game empire. Stay tuned for more!");  }  else {  "I slaved away at this game and you gave me that score?! The nerve! Just you wait!";  } |

# Introduction to Functions in JS

|  |  |
| --- | --- |
| 1 | var balance = 20.97;  // Complete the condition in the ()s on line 4  if (balance <= 10) {  // console.log() the balance minus 5 dollars  console.log(balance - 5);  } else {  // Just console.log() the balance  console.log(balance);  } |
| 2 | // This is what a function looks like:  var divideByThree = function (number) {  var val = number / 3;  console.log(val);  };  // On line 11, we call the function by name  // Here, it is called 'dividebythree'  // We tell the computer what the number input is (i.e. 6)  // The computer then uses the code inside the function!  divideByThree(6); |
| 3 | // Below is the greeting function!  // See line 7  // We can join strings together using the plus sign (+)  // See the hint for more details about how this works.  var greeting = function (name) {  console.log("Great to see you," + " " + name);  };  greeting();  // On line 11, call the greeting function! |
| 4 | // Write your foodDemand function below.  // Last hint: In your reusable block of code, end each line  // with a semicolon (;)  var foodDemand = function() {  console.log("I want to eat" + "" + "food");  };  foodDemand(); |
| 5 | // Nicely written function:  var calculate = function (number) {  var val = number \* 10;  console.log(val);  };  // Badly written function with syntax errors!  var greeting = function(name){  console.log("penis");  };  greeting(); |
| 6 | var orangeCost = function(Price){  var cost = Price \* 5;  console.log(cost);  };  orangeCost(5); |
| 7 | // Parameter is a number, and we do math with that parameter  var timesTwo = function(number) {  return number \* 2;  };  // Call timesTwo here!  var newNumber = timesTwo();  console.log(newNumber); |
| 8 | // Define quarter here.  var quarter = function(){  return number/4;  };  if (quarter() % 3 === 0 ) {  console.log("The statement is true");  } else {  console.log("The statement is false");  } |
| 9 | // Write your function starting on line 3  var perimeterBox = function(length, width)  {  return length + length + width + width;  };  perimeterBox(3,9); |
| 10 | var my\_number = 7; //this has global scope  var timesTwo = function(number) {  var my\_number = number \* 2;  console.log("Inside the function my\_number is: ");  console.log(my\_number);  };  timesTwo(7);  console.log("Outside the function my\_number is: ")  console.log(my\_number); |
| 11 | var nameString = function(name) {  return "Hi, I am" + " " + name;    };  console.log(nameString("Jeffrey")); |
| 12 | // Write your function below.  // Don't forget to call your function!  var creditCheck = function(income)  {  if (income>=100)  {  return "You earn a lot of money! You qualify for a credit card.";  }  else  {  return "Alas you do not qualify for a credit card. Capitalism is cruel like that.";  }  };  creditCheck(100); |
| 13 |  |

# Build “Rock, Paper, Scissors”

|  |  |
| --- | --- |
| 1 |  |
| 2 | var userChoice = prompt("Do you choose rock, paper or scissors?"); |
| 3 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  console.log(computerChoice); |
| 4 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice > 0 && computerChoice < 0.33) {  console.log(computerChoice, "is between 0 and 0.33");  }  else if (computerChoice > 0.34 && computerChoice < 0.66) {  console.log(computerChoice, "is between 0.34 and 0.66");  }  else if (computerChoice > 0.67 && computerChoice < 1) {  console.log(computerChoice, "is between 0 and 1");  } |
| 5 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice < 0.34) {  computerChoice = "rock";  } else if(computerChoice <= 0.67) {  computerChoice = "paper";  } else {  computerChoice = "scissors";  }  function compare(choice1, choice2){  if(choice1 == choice2){  return 'The result is a tie!';  }  } |
| 6 | /\*var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice < 0.34) {  computerChoice = "rock";  } else if(computerChoice <= 0.67) {  computerChoice = "paper";  } else {  computerChoice = "scissors";  }\*/  function compare(choice1, choice2){  if(choice1 == choice2){  return 'The result is a tie!';  }  if(choice1 == "rock" ){  if(choice2 == "scissors"){  return "rock wins";  }  else {  return "paper wins";  }  }  }  compare("rock", "paper"); |
| 7 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice < 0.34) {  computerChoice = "rock";  } else if(computerChoice <= 0.67) {  computerChoice = "paper";  } else {  computerChoice = "scissors";  }  function compare(choice1, choice2){  if(choice1 == choice2){  return 'The result is a tie!';  }  if(choice1 == "rock" ){  if(choice2 == "scissors"){  return "rock wins";  }  else if(choice2 == "paper"){  return "paper wins";  }  }    if(choice1 == "paper" ){  if(choice2 == "scissors"){  return "scissors wins";  }  else if(choice2 == "rock"){  return "paper wins";  }  }  }  compare("paper", "rock"); |
| 8 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice < 0.34) {  computerChoice = "rock";  } else if(computerChoice <= 0.67) {  computerChoice = "paper";  } else {  computerChoice = "scissors";  }  function compare(userChoice, computerChoice){  if(userChoice == computerChoice){  return 'The result is a tie!';  }  if(userChoice == "rock" ){  if(computerChoice == "scissors"){  return "rock wins";  }  else if(computerChoice == "paper"){  return "paper wins";  }  }    if(userChoice == "paper" ){  if(computerChoice == "scissors"){  return "scissors wins";  }  else if(computerChoice == "rock"){  return "paper wins";  }  }  if(userChoice == "scissors" ){  if(computerChoice == "paper"){  return "scissors wins";  }  else if(computerChoice == "rock"){  return "rock wins";  }  }  }  compare(userChoice,computerChoice); |
| 9 | var userChoice = prompt("Do you choose rock, paper or scissors?");  var computerChoice = Math.random();  if (computerChoice < 0.34) {  computerChoice = "rock";  } else if(computerChoice <= 0.67) {  computerChoice = "paper";  } else {  computerChoice = "scissors";  }  function compare(userChoice, computerChoice){  if(userChoice == computerChoice){  return 'The result is a tie!';  }  if(userChoice == "rock" ){  if(computerChoice == "scissors"){  return "rock wins";  }  else if(computerChoice == "paper"){  return "paper wins";  }  }    if(userChoice == "paper" ){  if(computerChoice == "scissors"){  return "scissors wins";  }  else if(computerChoice == "rock"){  return "paper wins";  }  }  if(userChoice == "scissors" ){  if(computerChoice == "paper"){  return "scissors wins";  }  else if(computerChoice == "rock"){  return "rock wins";  }  }  }  compare(userChoice,computerChoice); |

# Introduction to ‘For’ Loops in JS

|  |  |
| --- | --- |
| 1 | // Write five console.log statements.  console.log(1);  console.log(2);  console.log(3);  console.log(4);  console.log(5); |
| 2 | // Example of a for loop:  for (var counter = 1; counter < 11; counter++) {  console.log(counter);  } |
| 3 | // Change where the for loop starts.  for (var i = 5; i < 11; i = i + 1){  console.log(i);  } |
| 4 | // Edit this for loop  for (var i = 4; i <= 23; i = i + 1) {  console.log(i);  } |
| 5 | // Edit this for loop!  for (var i = 5; i <= 50; i+=5) {  console.log(i);  } |
| 6 | // Example for loop  for (var i = 8 ; i < 120; i+=12) {  console.log(i);  } |
| 7 | // Example of infinite loop. THIS WILL CRASH YOUR  // BROWSER. Don't run the code without changing it!  for (var i = 10; i >= 0; i--) {  console.log(i);  } |
| 8 | // Write your very own for loop!  for(var i=100; i > 0; i-= 5){  console.log(i);  } |
| 9 | // You are now declaring an array.  // Arrays are an awesome data structure!  var junk = ["Ghandi","Kluk",1089,1089];  console.log(junk); |
| 10 | // Practice array!  var junkData = ["Eddie Murphy", 49, "peanuts", 31];  console.log(junkData[3]); |
| 11 | // Let's print out every element of an array using a for loop  var cities = ["Melbourne", "Amman", "Helsinki", "NYC","Kluk",1089];  for (var i = 0; i < cities.length; i++) {  console.log("I would like to visit " + cities[i]);  } |
| 12 | // Ask a question on the Q&A Forum if you get stuck!  var names = ["Kluk","Jeffrey","Jerry",1089,"Jeff"];  for(var i=0; i<names.length;i++){  console.log("I know someone called " + names[i]);  } |
| 13 | var array = [3, 6, 2, 56, 32, 5, 89, 32];  var largest = 0;  // Write your code below!  for(var i=0; i<array.length;i++){  if(array[i]>largest){  largest = array[i];  }  }  console.log(largest); |
| 14 |  |

# Search Text for Your Name

|  |  |
| --- | --- |
| 1 | /\*jshint multistr:true \*/  text = "Blah blah blah blah blah blah Eric \  blah blah blah Eric blah blah Eric blah blah \  blah blah blah blah blah Eric";  var myName = "Eric";  var hits = [];  // Look for "E" in the text  for(var i = 0; i < text.length; i++) {  if (text[i] == "E") {  // If we find it, add characters up to  // the length of my name to the array  for(var j = i; j < (myName.length + i); j++) {  hits.push(text[j]);  }  }  }  if (hits.length === 0) {  console.log("Your name wasn't found!");  } else {  console.log(hits);  } |
| 2 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[]; |
| 3 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[];  for(var i=0;i<text.length;i++){} |
| 4 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[];  for(var i=0;i<text.length;i++){  if(text[i]=="J") hits += myName[i];  } |
| 5 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[];  for(var i = 0; i < text.length; i++) {  if (text[i] == "J") {  // If we find it, add characters up to  // the length of my name to the array  for(var j = i; j < (myName.length + i); j++) {  hits.push(myName[i]);  }  }  } |
| 6 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[];  for(var i = 0; i < text.length; i++) {  if (text[i] == "J") {  // If we find it, add characters up to  // the length of my name to the array  for(var j = i; j < (myName.length + i); j++) {  hits.push(myName[i]);  }  }  }  for(i=0; i<myName.length;i++){  console.log(myName[i]);  } |
| 7 | /\*jshint multistr:true \*/  var text="Jeffrey Jeffrey Jeffrey";  var myName="Jeffrey";  var hits=[];  for(var i = 0; i < text.length; i++) {  if (text[i] == "J") {  // If we find it, add characters up to  // the length of my name to the array  for(var j = i; j < (myName.length + i); j++) {  hits.push(myName[i]);  }  }  }  for(i=0; i<myName.length;i++){  console.log(myName[i]);  } |

# Introduction to while loops

|  |  |
| --- | --- |
| 1 | var coin = Math.floor(Math.random() \* 2);  while(coin){  console.log("Heads! Flipping again...");  var coin = Math.floor(Math.random() \* 2);  }  console.log("Tails! Done flipping."); |
| 2 | var understand = true;  while( understand ==1 ){  console.log("I'm learning while loops!");  understand = false;  } |
| 3 | understand = true;  while(understand === 0){  console.log("I'm learning while loops!");  //Change the value of 'understand' here!    } |
| 4 | var bool = true;  while(bool){  console.log("Less is more!");  bool = false;  } |
| 5 | //Remember to set your condition outside the loop!  var loop = function(i){  while(i<=2){  console.log("I'm looping!");  i++;  }  };  loop(0); |
| 6 | //Remember to make your condition true outside the loop!  var soloLoop = function(condition){  //Your code goes here!  while(condition === true){  console.log('Looped once!');  condition =false;  }  };  soloLoop(true); |
| 7 |  |
| 8 | var condition1 = true;  while(condition1 ===true){  console.log('herpes');  condition1 = false;  }  for(condition2 = true; condition2!==true; condition=false){  console.log('derpes');  } |
| 9 | loopCondition = false;  do {  console.log("I'm gonna stop looping 'cause my condition is " + String(loopCondition) + "!");  } while (loopCondition); |
| 10 | var getToDaChoppa = function(condition){  // Write your do/while loop here!  do{  console.log('got onto the choppa');  }while(condition===true)  };  getToDaChoppa(false); |
| 11 | // Write your code below!  var derp = true;  var herp = true;  while(derp===true){  console.log('While loop');  derp = false;  }  for(i=0; i<1; i++){  console.log('for loop');  }  do{  console.log('Subject 1089 is the most badass pig existing');  }while(herp===false); |

# Dragon Slayer

|  |  |
| --- | --- |
| 1 | var slaying = true;  // A bit of new math magic to calculate the odds  // of hitting the dragon. We'll cover this soon!  var youHit = Math.floor(Math.random() \* 2);  var damageThisRound = Math.floor(Math.random() \* 5 + 1);  var totalDamage = 0;  while (slaying) {  if (youHit) {  console.log("You hit the dragon and did " + damageThisRound + " damage!");  totalDamage += damageThisRound;    if (totalDamage >= 4) {  console.log("You did it! You slew the dragon!");  slaying = false;  } else {  youHit = Math.floor(Math.random() \* 2);  }  } else {  console.log("The dragon burninates you! You're toast.");  slaying = false;  }  } |
| 2 | var slaying = true;  var youHit = Math.floor(Math.random()\*2);  var damageThisRound = Math.floor(Math.random()\*5);  var totalDamage = 0; |
| 3 | var slaying = true;  var youHit = Math.floor(Math.random()\*2);  var damageThisRound = Math.floor(Math.random()\*5);  var totalDamage = 0;  while(slaying){  slaying = false;  } |
| 4 | var slaying = true;  var youHit = Math.floor(Math.random()\*2);  var damageThisRound = Math.floor(Math.random()\*5);  var totalDamage = 0;  while(slaying){  if(youHit==1){  console.log('You hit the dragon!');  }  else {  console.log('You did not kill the dragon, you should kill yourself for missing a creature that big.');  }    slaying = false;  } |
| 5 | var slaying = true;  var youHit = Math.floor(Math.random()\*2);  var damageThisRound = Math.floor(Math.random()\*5);  var totalDamage = 0;  while(slaying){  if(youHit==1){  console.log('You hit the dragon!');  totalDamage += damageThisRound;  if (totalDamage >= 4) {  console.log("You win!");  slaying = false;  } else {  youHit = Math.floor(Math.random() \* 2);  }  }  else {  console.log('You did not kill the dragon, you should kill yourself for missing a creature that big.');  }  slaying = false;  } |
| 6 | var slaying = true;  var youHit = Math.floor(Math.random()\*2);  var damageThisRound = Math.floor(Math.random()\*5);  var totalDamage = 0;  while(slaying){  if(youHit==1){  console.log('You hit the dragon!');  totalDamage += damageThisRound;  if (totalDamage >= 4) {  console.log("You win!");  slaying = false;  } else {  youHit = Math.floor(Math.random() \* 2);  }  }  else {  console.log('You did not kill the dragon, you should kill yourself for missing a creature that big.');  }  slaying = false;  } |

# More on Control Flow in JS

|  |  |
| --- | --- |
| 1 | var isEven = function(number) {  // Your code goes here!  if(number%2===0){  return true;  }  else return false;  }; |
| 2 | var isEven = function(number) {  // Your code goes here!    if(number%2===0){  return true;  }  else if(isNaN(number)===true) return "false";  }; |
| 3 | // Write your loop below!  for(i=0;i<=10;i++){  console.log(i);  } |
| 4 | var lunch = prompt("What do you want for lunch?","Type your lunch choice here");  switch(lunch){  case 'sandwich':  console.log("Sure thing! One sandwich, coming up.");  break;  case 'soup':  console.log("Got it! Tomato's my favorite.");  break;  case 'salad':  console.log("Sounds good! How about a caesar salad?");  break;  case 'pie':  console.log("Pie's not a meal!");  break;  default:  console.log("Huh! I'm not sure what " + lunch + " is. How does a sandwich sound?");  } |
| 5 | var color = prompt("What's your favorite primary color?","Type your favorite color here");  switch(color) {  case 'red':  console.log("Red's a good color!");  break;  case 'blue':  console.log("That's my favorite color, too!");  break;  //Add your case here!  case 'yellow':  console.log("Let the yellowness rise again");  break;  default:  console.log("I don't think that's a primary color!");  } |
| 6 | var candy = prompt("What's your favorite candy?","Type your favorite candy here.");  switch(candy) {  case 'liqourice':  console.log("Gross!");  break;  case 'gum':  console.log("I like gum!");  break;  case 'beets':  console.log("...is that even a candy?");  break;  // Add your code here!  default:  console.log("")    } |
| 7 | var answer = prompt("Add your question here!");  switch(answer) {  case 'beep':  console.log('beep');  break;  // Add your code here!  case 'dafuc':  console.log('dafuc');  break;  default:  console.log('boop');  break;  } |
| 8 | // Write your code below!  var answer = prompt("I smell like boredom");  switch(answer){  case 'derp':  console.log('beasm');  break;  case 'merp':  console.log('kasdnga');  break;  case 'herp':  console.log('kassadilla');  break;  default:  console.log('defaultyness');  break;  } |
| 9 | // Write your code below!  var answer = prompt("I smell like boredom");  switch(answer){  case 'derp':  console.log('beasm');  break;  case 'merp':  console.log('kasdnga');  break;  case 'herp':  console.log('kassadilla');  break;  default:  console.log('defaultyness');  break;  } |
| 10 | // Complete lines 1 and 2!  var iLoveJavaScript = true;  var iLoveLearning = true;  if(iLoveJavaScript && iLoveLearning) {  // if iLoveJavaScript AND iLoveLearning:  console.log("Awesome! Let's keep learning!");  } else if(!(iLoveJavaScript || iLoveLearning)) {  // if NOT iLoveJavaScript OR iLoveLearning:  console.log("Let's see if we can change your mind.");  } else {  console.log("You only like one but not the other? We'll work on it.");  } |
| 11 | // Declare your variables here!  var hungry = true;  var foodHere = true;  var eat = function() {  // Add your if/else statement here!  if(hungry && foodHere){  return true;  }  else{  return false;  }  };  eat(); |
| 12 | // Declare your variables here!  var tired = true;  var bored = false;  var nap = function() {  // Add your if/else statement here!  if(tired || bored){  return true;  }  else{  return false;  }  }; |
| 13 | // Declare your variables here! var programming= false;  var happy = function() { // Add your if/else statement here! if( !programming){ return true; } else{ return false; } }; |
| 14 |  |

# Choose Your Own Adventure 2

|  |  |
| --- | --- |
| 1 | var troll = prompt("You're walking through the forest, minding your own business, and you run into a troll! Do you FIGHT him, PAY him, or RUN?").toUpperCase();  switch(troll) {  case 'FIGHT':  var strong = prompt("How courageous! Are you strong (YES or NO)?").toUpperCase();  var smart = prompt("Are you smart?").toUpperCase();  if(strong === 'YES' || smart === 'YES') {  console.log("You only need one of the two! You beat the troll--nice work!");  } else {  console.log("You're not strong OR smart? Well, if you were smarter, you probably wouldn't have tried to fight a troll. You lose!");  }  break;  case 'PAY':  var money = prompt("All right, we'll pay the troll. Do you have any money (YES or NO)?").toUpperCase();  var dollars = prompt("Is your money in Troll Dollars?").toUpperCase();  if(money === 'YES' && dollars === 'YES') {  console.log("Great! You pay the troll and continue on your merry way.");  } else {  console.log("Dang! This troll only takes Troll Dollars. You get whomped!");  }  break;  case 'RUN':  var fast = prompt("Let's book it! Are you fast (YES or NO)?").toUpperCase();  var headStart = prompt("Did you get a head start?").toUpperCase();  if(fast === 'YES' || headStart === 'YES') {  console.log("You got away--barely! You live to stroll through the forest another day.");  } else {  console.log("You're not fast and you didn't get a head start? You never had a chance! The troll eats you.");  }  break;  default:  console.log("I didn't understand your choice. Hit Run and try again, this time picking FIGHT, PAY, or RUN!");  } |
| 2 | var user = prompt("Do you like cheesecake?"); |
| 3 | var userName = prompt("What's your name soldier?!").toLowerCase(); |
| 4 | var userName = prompt("What's your name soldier?!").toLowerCase();  var question1 = prompt("What would you like to fight for?!, Honor? Family?, Cake?").toLowerCase();  switch(question1){  case 'honor':  console.log("You'll loose anyway, better stop now.");  break;  case 'family':  console.log("They'll die sooner or later, better quit now.");  break;  case 'cake':  console.log("UNTILL DEATH RIPS US APART!");  break;  default:  console.log("You better stop now, if you can not even talk properly.");  break;  } |
| 5 | var userName = prompt("What's your name soldier?!").toLowerCase();  var question1 = prompt("What would you like to fight for?!, Honor? Family?, Cake?").toLowerCase();  switch(question1){  case 'honor':  console.log("You'll loose anyway, better stop now.");  break;  case 'family':  console.log("They'll die sooner or later, better quit now.");  break;  case 'cake':  console.log("UNTILL DEATH RIPS US APART!");  break;  default:  console.log("You better stop now, if you can not even talk properly.");  break;  }  if(userName == "jerry" && question1 == "cake"){  console.log('You show alot of honor Jerry!');  }  else if(userName == "jerry" || question1 == "cake"){  console.log("It's something.");  } |
| 6 | var userName = prompt("What's your name soldier?!").toLowerCase();  var question1 = prompt("What would you like to fight for?!, Honor? Family?, Cake?").toLowerCase();  switch(question1){  case 'honor':  console.log("You'll loose anyway, better stop now.");  break;  case 'family':  console.log("They'll die sooner or later, better quit now.");  break;  case 'cake':  console.log("UNTILL DEATH RIPS US APART!");  break;  default:  console.log("You better stop now, if you can not even talk properly.");  break;  }  if(userName == "jerry" && question1 == "cake"){  console.log('You show alot of honor Jerry!');  }  else if(userName == "jerry" || question1 == "cake"){  console.log("It's something.");  } |

# Arrays and Objects in JS

|  |  |
| --- | --- |
| 1 | var list = ['derp','merp','kerp']; |
| 2 | var languages = ["HTML", "CSS", "JavaScript", "Python", "Ruby"];  console.log(languages[2]); |
| 3 | var languages = ["HTML", "CSS", "JavaScript", "Python", "Ruby"];  console.log(languages[2]);  console.log(languages.length); |
| 4 | var languages = ["HTML", "CSS", "JavaScript", "Python", "Ruby"];  for(i=0;i<languages.length;i++){  console.log(languages[i]);  } |
| 5 | var myArray = [2,true,"BEEP!"]; |
| 6 | var newArray = [[1,1,1],[1,1,1],[1,1,1]]; |
| 7 | var jagged = [[1,1],[2,2,3]]; |
| 8 |  |
| 9 | var phonebookEntry = {};  phonebookEntry.name = 'Oxnard Montalvo';  phonebookEntry.number = '(555) 555-5555';  phonebookEntry.phone = function() {  console.log('Calling ' + this.name + ' at ' + this.number + '...');  };  phonebookEntry.phone(); |
| 10 | var me = {  name: "Jeffrey",  age: 17  }; |
| 11 | var me = new Object();  me["name"] = "Jeff";  me["age"] = 17;  me.name;  me.age; |
| 12 | var object1 = new Object();  var object2 = new Object();  var object3 = new Object();  object1["head"] = "This is the head speaking";  object2["torso"] = "This is the awesome middlepart of the body speaking";  object3["legs"] = "This is red leg zef speaking"; |
| 13 |  |
| 14 | myArray = [12,true,"beo",new Object()]; |
| 15 | var newArray = [[1,1],[new Object()]]; |
| 16 | var myObject = {  name: 'Eduardo',  type: 'Most excellent',  interests: ['derp','something']  }; |
| 17 | var myOwnObject = {  lock: 'Key',  derp: 'not blitzcrank'  }; |

# Contact List

|  |  |
| --- | --- |
| 1 | var friends = {};  friends.bill = {  firstName: "Bill",  lastName: "Gates",  number: "(206) 555-5555",  address: ['One Microsoft Way','Redmond','WA','98052']  };  friends.steve = {  firstName: "Steve",  lastName: "Jobs",  number: "(408) 555-5555",  address: ['1 Infinite Loop','Cupertino','CA','95014']  };  var list = function(obj) {  for(var prop in obj) {  console.log(prop);  }  };  var search = function(name) {  for(var prop in friends) {  if(friends[prop].firstName === name) {  console.log(friends[prop]);  return friends[prop];  }  }  };  list(friends);  search("Steve"); |
| 2 | var friends = {    }; |
| 3 | var friends = {  bill:{},  steve:{}  }; |
| 4 | var friends = {  bill:{  firstName: "Bill",  lastName: "Cosby",  number: "(255)555-555"  },  steve:{  firstName: "Steve",  lastName: "Stevy",  number: "(255)555-554"  }  }; |
| 5 | var friends = {  bill:{  firstName: "Bill",  lastName: "Cosby",  number: "(255)555-555",  address: []  },  steve:{  firstName: "Steve",  lastName: "Stevy",  number: "(255)555-554",  address: []  }  }; |
| 6 | var friends = {  bill:{  firstName: "Bill",  lastName: "Cosby",  number: "(255)555-555",  address: []  },  steve:{  firstName: "Steve",  lastName: "Stevy",  number: "(255)555-554",  address: []  }  };  var list = function (obj){  for(var list in friends){  console.log(list);  }  }; |
| 7 | var friends = {  bill:{  firstName: "Bill",  lastName: "Cosby",  number: "(255)555-555",  address: []  },  steve:{  firstName: "Steve",  lastName: "Stevy",  number: "(255)555-554",  address: []  }  };  var list = function (obj){  for(var list in friends){  console.log(list);  }  };  var search = function(name) {  for(var look in friends) {  if(friends[look].firstName === name) {  console.log(friends[look]);  return friends[look];  }  }  };  search('Steve'); |
| 8 | var friends = {  bill:{  firstName: "Bill",  lastName: "Cosby",  number: "(255)555-555",  address: []  },  steve:{  firstName: "Steve",  lastName: "Stevy",  number: "(255)555-554",  address: []  }  };  var list = function (obj){  for(var list in friends){  console.log(list);  }  };  var search = function(name) {  for(var look in friends) {  if(friends[look].firstName === name) {  console.log(friends[look]);  return friends[look];  }  }  };  search('Steve'); |

# Introduction to Objects 1

|  |  |
| --- | --- |
| 1 | var answer =(((3 \* 90) === 270) || !(false && (!false)) || "bex".toUpperCase() === "BEX"); |
| 2 | // Here is an array of multiples of 8. But is it correct?  var multiplesOfEight = [8,16,24,32,40,58];  // Test to see if a number from the array is NOT a true  // multiple of eight. Real multiples will return false.  var answer = multiplesOfEight[multiplesOfEight] % 8 !== 0; |
| 3 | for (var i= 1; i<21; i++) {  if (i%3 === 0) {  if (i%5 === 0) {  console.log("FizzBuzz");  }  else {  console.log("Fizz");  }  }  else if (i%5 === 0) {  console.log("Buzz");  }  else {  console.log(i);  }  } |
| 4 | var getReview = function (movie) {  switch(movie){  case "Matrix":  return("good trip out");  case "Princess Bride":  return("awesome date night movie");  case "Welcome to America":  return("Amjad's favorite");  case "Remember the Titans":  return("love the sports");  case "Why do I look like I'm 12?":  return("The Ryan and Zach story");  case "Fighting Kangaroos in the wild":  return("Token Australian movie for Leng");  default:  return("I don't know!");  }  }; |
| 5 | // super proud of your code?  // post it to the forum!  console.log("I'm ready for Objects!"); |
| 6 | var bob = {    }; |
| 7 | var Spencer = {  age: 22,  country: "United States"  };  // make your own object here called Me  var Me = {  age:17,  country: "The Netherlands"  }; |
| 8 | var bob = {  name: "Bob Smith",  age: 30  };  var susan = {  name: "Susan Jordan",  age: 25  };  // here we save Bob's information  var name1 = bob.name;  var age1 = bob.age;  // finish this code by saving Susan's information  var name2 = susan.name;  var age2 = susan.age; |
| 9 | // Take a look at our next example object, a dog  var dog = {  species: "greyhound",  weight: 60,  age: 4  };  var species = dog["species"];  // fill in the code to save the weight and age using bracket notation  var weight = dog["weight"];  var age = dog["age"]; |
| 10 | // Our bob object again, but made using a constructor this time  var bob = new Object();  bob.name = "Bob Smith";  bob.age = 30;  // Here is susan1, in literal notation  var susan1 = {  name: "Susan Jordan",  age: 24  };  // Make a new susan2 object, using a constructor instead  var susan2 = new Object();  susan2.name = "Susan Jordan";  susan2.age = 24; |
| 11 | // help us make snoopy using literal notation  // Remember snoopy is a "beagle" and is 10 years old.  var snoopy = {  species: "beagle",  age: 10  };  // help make buddy using constructor notation  // buddy is a "golden retriever" and is 5 years old  var buddy = new Object();  buddy.species = "golden retriever";  buddy.age = 5; |
| 12 | var BMW = {  cost: "too much",  speed: 220,  country: "Germany"  }; |
| 13 | // Accepts a number x as input and returns its square  var square = function (x) {  return x \* x;  };  // Write the function multiply below  // It should take two parameters and return the product  var multiply = function(x,y) {  return x \* y;  };  multiply(24,12); |
| 14 | // here is bob again, with his usual properties  var bob = new Object();  bob.name = "Bob Smith";  bob.age = 30;  // this time we have added a method, setAge  bob.setAge = function (newAge){  bob.age = newAge;  };  // here we set bob's age to 40  bob.setAge(40);  // bob's feeling old. Use our method to set bob's age to 20  bob.setAge(20); |
| 15 | var bob = new Object();  bob.age = 30;  // this time we have added a method, setAge  bob.setAge = function (newAge){  bob.age = newAge;  };  bob.getYearOfBirth = function () {  return 2013 - bob.age;  };  console.log(bob.getYearOfBirth()); |
| 16 | // here we define our method using "this", before we even introduce bob  var setAge = function (newAge) {  this.age = newAge;  };  // now we make bob  var bob = new Object();  bob.age = 30;  // and down here we just use the method we already made  bob.setAge = setAge;    // change bob's age to 50 here  bob.setAge(50); |
| 17 | // here we define our method using "this", before we even introduce bob  var setAge = function (newAge) {  this.age = newAge;  };  // now we make bob  var bob = new Object();  bob.age = 30;  bob.setAge = setAge;    // make susan here, and first give her an age of 25  var susan = new Object();  susan.age = 25;  susan.setAge = setAge;  // here, update Susan's age to 35 using the method  susan.setAge(35); |
| 18 | var rectangle = new Object();  rectangle.height = 3;  rectangle.width = 4;  // here is our method to set the height  rectangle.setHeight = function (newHeight) {  this.height = newHeight;  };  // help by finishing this method  rectangle.setWidth = function (newWidth) {  this.width = newWidth;  }  // here change the width to 8 and height to 6 using our new methods  rectangle.setWidth(8);  rectangle.setHeight(6); |
| 19 | var square = new Object();  square.sideLength = 6;  square.calcPerimeter = function() {  return this.sideLength \* 4;  };  // help us define an area method here  square.calcArea = function() {  return this.sideLength \* this.sideLength;  };  var p = square.calcPerimeter();  var a = square.calcArea(); |
| 20 | // here we make bob using the Object constructor  var bob = new Object();  bob.name = "Bob Smith";  bob.age = 0;  // add bob's age here and set it equal to 20  bob.age=20; |
| 21 | function Person(name,age) {  this.name = name;  this.age = age;  }  // Let's make bob and susan again, using our constructor  var bob = new Person("Bob Smith", 30);  var susan = new Person("Susan Jordan", 25);  // help us make george, whose name is "George Washington" and age is 275  var george = new Person("George Washington",275); |
| 22 | function Cat(age, color) {  this.age = age;  this.color = color;  }  // make a Dog constructor here  function Dog(age,name,breed,whatever\_you\_can\_think\_of){  this.age = age;  this.name = name;  this.breed = breed;  this.whatever\_you\_can\_think\_of = whatever\_you\_can\_think\_of;  } |
| 23 | function Person(name,age) {  this.name = name;  this.age = age;  this.species = "Homo Sapiens";  }  var sally = new Person("Sally Bowles", 39);  var holden = new Person("Holden Caulfield", 16);  console.log("sally's species is " + sally.species + " and she is " + sally.age);  console.log("holden's species is " + holden.species + " and he is " + holden.age); |
| 24 | function Rectangle(height, width) {  this.height = height;  this.width = width;  this.calcArea = function() {  return this.height \* this.width;  };  // put our perimeter function here!  this.calcPerimeter = function(){  return 2\*this.height + 2\*this.width;  };  }  var rex = new Rectangle(7,3);  var area = rex.calcArea();  var perimeter = rex.calcPerimeter(23,12); |
| 25 | function Rabbit(adjective) {  this.adjective = adjective;  this.describeMyself = function() {  console.log("I am a " + this.adjective + " rabbit");  };  }  // now we can easily make all of our rabbits  var rabbit1 = new Rabbit("fluffy");  var rabbit2 = new Rabbit("happy");  var rabbit3 = new Rabbit("sleepy");  rabbit1.describeMyself();  rabbit2.describeMyself();  rabbit3.describeMyself(); |
| 26 | // Our person constructor  function Person (name, age) {  this.name = name;  this.age = age;  }  // Now we can make an array of people  var family = new Array();  family[0] = new Person("alice", 40);  family[1] = new Person("bob", 42);  family[2] = new Person("michelle", 8);  // add the last family member, "timmy", who is 6 years old  family[3] = new Person("timmy",6); |
| 27 | // Our Person constructor  function Person(name,age){  this.name = name;  this.age = age;  }  // Now we can make an array of people  var family = new Array();  family[0] = new Person("alice",40);  family[1] = new Person("bob",42);  family[2] = new Person("michelle",8);  family[3] = new Person("timmy",6);  // loop through our new array  for(i=0;i<family.length;i++){  console.log(family[i]);  } |
| 28 | // Our person constructor  function Person (name, age) {  this.name = name;  this.age = age;  }  // We can make a function which takes persons as arguments  // This one computes the difference in ages between two people  var ageDifference = function(person1, person2) {  return person1.age - person2.age;  }  var alice = new Person("Alice", 30);  var billy = new Person("Billy", 25);  // get the difference in age between alice and billy using our function  var diff = ageDifference(alice,billy); |
| 29 | // Our person constructor  function Person (name, age) {  this.name = name;  this.age = age;  }  // We can make a function which takes persons as arguments  // This one computes the difference in ages between two people  var ageDifference = function(person1, person2) {  return person1.age - person2.age;  };  // Make a new function, olderAge, to return the age of  // the older of two people  var olderAge = function(person1, person2){  if(person1.age<person2.age){  return person2.age;  }  else {  return person1.age;  }  }  // Let's bring back alice and billy to test our new function  var alice = new Person("Alice", 30);  var billy = new Person("Billy", 25);  console.log("The older person is " + olderAge(alice, billy)); |
| 30 | var spencer = {  age: 22,  country: "United States"  };  // make spencer2 here with constructor notation  var spencer2 = new Object();  spencer2.age = 22;  spencer2.country = "United States"; |
| 31 | var snoopy = new Object();  snoopy.species = "beagle";  snoopy.age = 10;  // save Snoopy's age and species into variables  // use dot notation for snoopy's species  var species = snoopy.species;    // use bracket notation for snoopy's age  var age = snoopy["age"]; |
| 32 | // 3 lines required to make harry\_potter  var harry\_potter = new Object();  harry\_potter.pages = 350;  harry\_potter.author = "J.K. Rowling";  // A custom constructor for book  function Book (pages, author) {  this.pages = pages;  this.author = author;  }  // Use our new constructor to make the\_hobbit in one line  var the\_hobbit = new Book(320,"J.R.R. Tolkien"); |
| 33 | function Circle (radius) {  this.radius = radius;  this.area = function () {  return Math.PI \* this.radius \* this.radius;    };  // define a perimeter method here  this.perimeter = function(){  return 2 \* Math.PI \* this.radius;  };  } |