# Javascript Scope Exercises

1. Determine what this Javascript code will print out (without running it):

x = 1;

var a = 5;

var b = 10;

var c = function(a, b, c) {

var x = 10;

document.write(x); //10

document.write(a); //8

var f = function(a, b, c) {

b = a;

document.write(b); //8

b = c;

var x = 5;

}

f(a,b,c);

document.write(b); //9

}

c(8,9,10);

document.write(b); //10

document.write(x); //1

}a) 10 8 8 9 10 1.

1. What is the difference between a method and function?

a) Method is a function when object is associated with it. When no object is associated with it, it comes to function.

1. What does 'this' refer to when used in a Java method?

a) The current object.

1. What does 'this' refer to when used in a JavaScript method?

a) The object which is executing the current peace of Javascript code.

1. What does 'this' refer to when used in a JavaScript constructor function?

a) The object that "owns" the code of the constructor.

1. Assume object x is the prototype for object y in Javascript. Object x has a method f( ) containing keyword 'this'. When f is called by x.f( ), what does 'this' refer to?

a) The specific object that called it originally. It binds to whatever object that calls the function.

1. What is a free variable in JavaScript?

a) It’s a variable in a parent function, which means it’s not declared in the current function nor passed to it as a parameter. However, the current function can still access it.

1. Create an object that has properties with name = "fred" and major="music" and a property that is a function that takes 2 numbers and returns the smallest of the two, or the square of the two if they are equal.

a) var obj = {

name: “fred”,

major: “music”,

fun: function (x, y){

if (x === y)

return x \* y;

else if (x < y)

return x;

else

return y;

}

}

1. Write Javascript code for creating three Employee objects using the "new" keyword and a constructor function. Employee objects have the following fields: name, salary, position.

a) Employee = function (name, salary, position) {

this.name = name;

this.salary = salary;

this.position = position;

}

Var obj = new Employee (‘Dalia’, 1000, ‘CRM Developer’);

1. Write a Javascript function that takes any number of input arguments and returns the product of the arguments.

a) function blah () {

var product = “”;

for (let i = 0; i < arguments.length ; ++i)

product += arguments[i];

}

1. Write an arrow function that returns the maximum of its three input arguments.

a) function findMax() {

var max = -Infinity;

for (i = 0; i < arguments.length; i++) {

if (arguments[i] > max)

max = arguments[i];

}

return max;

}