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);

document.write(a);

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

b = a; document.write(b);

b = c; var x = 5;

}

f(a,b,c);

document.write(b);

}

c(8,9,10);

document.write(b);

document.write(x);

ANSWER=>

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

ANSWER=> The Method is a function associated with an object, which is property of an object.

The Function is a segment of code that executes an action & gives out a reply.

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

ANSWER=> “this” in java a reference to the current object ,whose method is being called up on.

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

ANSWER=> “this” keyword refers to the global object when used inside a function but is undefined

when invoke in function in strict mode.

Unlike in java ,”this” keyword is mandatory in javascript

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

ANSWER=>\*when you instantiate a javascript constructor function, an object is returned

\*The javascript “this” keyword has a special meaning inside of that object: it refers to itself.

\*When you create your constructor function, you can use the “this” keyword to reference

the object that will be created when the constructor is instantiated.

6. 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?

ANSWER=> “this” – referring to the object it belongs right now which is y

7. What is a free variable in JavaScript?

ANSWER=>\*Free variable ; a variable referred to by a function that is not one of its parameters or local variables.

\*Free variable are simply the variables that are neither locally declared nor passed as parameter

8. 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.

9. 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.

ANSWER=> function Employee(name,salary,position){

this.name=name;

this.salary=salary;

this.position=position;

}

var Mary = new Employee(“Mary”,40000,”Manager”);

var elen = new Employee(“Elen”,30000,”Secretary”);

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

ANSWER=> function findProduct(){

Var i;

Var product=1;

If(arguments.length === 0){

return 0;

}

Else{

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

product \*= arguments[i];

}

return product;

}

var x = findProduct(1,2,3,4);//24

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