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); //1st. 10

document.write(a); //2nd. 8

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

b = a;

document.write(b); //3rd. 8

b = c;

var x = 5;

}

f(a,b,c);

document.write(b); //4th. 9

}

c(8,9,10);

document.write(b); //5th. 10

document.write(x); //6th. 1

Answer: 10 8 8 9 10 1

=======================================================

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

Answer:

A Method is a property of an object that contains a function definition. Methods are functions stored as object properties.

Whereas a function is a block of code written to perform some specific set of tasks.

We can define a function using the function keyword, followed by Name and optional parameters.

Body of function is enclosed in Curly braces.

=======================================================

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

Answer:

'this' is a reference variable that refers to the current object.

=======================================================

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

Answer:

'this' refers to the owner object.

=======================================================

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

Answer:

In a constructor function this does not have a value.

It is a substitute for the new object.

The value of this will become the new object when a new object is created.

=======================================================

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' refers to the object x

=======================================================

7. What is a free variable in JavaScript?

Answer:

A variable referred to by a function that is not one of its parameters or local variables

=======================================================

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.

Answer:

var obj={

"name": "fred",

"major":"music",

"f":function(x,y){

if(x>y){

return y;

}else if(x<y){

return x;

}else{

return (x\*x)+(y\*y);

}

}

};

=======================================================

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 frank = new Employee("Frank Lampard", 80000, "Director");

var ken = new Person("Ken Jones", 90000, "Manager");

var afe = new Person("Afework Fita", 180000, "Senior software engineer");

=======================================================

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

Answer:

function anyProduct(...n){

let product;

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

product \*=n[i];

}

return product;

}

=======================================================

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

Answer:

var maxOfThree=(num1,num2,num3)=>{

let largest;

if(num1 >= num2 && num1 >= num3) {

largest = num1;

}

else if (num2 >= num1 && num2 >= num3) {

largest = num2;

}

else {

largest = num3;

}

return largest;

};