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:

10, 8, 8, 9, 10, 1

…………………………………………………………………………………

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

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*.

**Features:**

* The function is executed when something calls/invokes it.
* The name may contain letters, digits, dollar signs, underscore.
* Parameters are listed inside round parenthesis after the name of the function.
* Arguments are values a function receives when it is invoked.
* When the control reaches the return statement, js will stop executing and the value is returned to the caller.

method is a property of an object that contains a function definition. Methods are functions stored as object properties. Object method can be accessed with the following syntax:

**Features:**

* Actions that can be performed on objects are what we term JavaScript methods.
* The objects can also be called without using parenthesis.
* This refers to the owner object in a method.

**……………………………………………………………………..**

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

Answer:

this keyword refers to the current object in a method or constructor. The most common use of this keyword is to eliminate the confusion between class attributes and parameters with the same name. or this refer to the class of the object is calling. Can be a method or even a field.

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

Answer:

The JavaScript this keyword refers to the object it belongs to.

In a method, this refers to the owner object.

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

Answer:

In JavaScript, the thing called this is the object that "owns" the code.

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 which is calling the method. In this case it calls x.

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7. What is a free variable in JavaScript?

Answer:

A free variable is simply a variable which is not declared inside a given function but is used inside it.

Or A free variable is a variable used within a function, which is neither a formal parameter to the function nor defined in the function's body (and in scope at the point of the variable's use).

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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 findSmall={

Name: "fred",

Major: "Music",

math : function (x, y){

if(x!==y){

return Math.min(x, y)

}

else{

return squereOfX= Math.pow(x, 2) + "\n" + squereOfY= Math.pow(y, 2);

}}};

**…………………………………………………………………………………………..**

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 Emp1=new Employee(“mark smith”,60000,”programmer”);

Var Emp2=new Employee(“luise jhone”,75000,”lawyer”);

Var Emp3=new Employee(“ammanual martin”,65000,”accountant”);

………………………………………………………………………………

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

Answer;

Function numProduct(){

Var prod=1;

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

Prod\*=arguments[i];

}

Return prod;

}

Console.log(3,3);

Console.log(3,2,4);

………………………………………………………………………………………….

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

Answer;

Const maxOf=(a,b,c) =>{

return Math.max(a,b,c);

}

return maxOf(3,6,4);