



#5 [Function ÷ 3:16:00]

i * 8

for (i = 8; i < 10; i++)

1 1 1



⇒ Write a programme print table for given numbers (8, 9, 12, 15) using for loop;

```
for (var num = 1; num <= 10; num++)  
{  
    var tableOf = 8;  
    console.log(tableOf + " * " + num + " = " + tableOf * num);  
}
```

output

8 * 1 = 8

8 * 2 = 16 (8 * 2)

⇒ 8 * 10 = 80

#

Function in JavaScript

- Function Definition
- Calling a Function
- Function Parameter
- Function Arguments
- Function Expression
- Return Keywords
- Anonymous Function

Function JavaScript

A function is a block of code designed to perform a particular task.

★ ★ ★ ⇒ Function Definition

- Before we use a function, we need to define it.
- A function definition (also called function declaration, or function statement) consist of the function keyword, followed by:
 - a) The name of functions.
 - b) A list of parameters to the function, enclosed parathensesss and separated by commas.
- The javascript statement that define function, enclosed in curly brackets. {....}.

Syntax

keyword Name
↑ ↑
function funcName ()
{
 // statement
}

Why for

```
Var a = 10 ;  
Var b = 20 ;  
Var Sum = a+b ;  
Console.log (sum)
```

Func

```
function Sum () {  
    Var a = 10, b = 20 ;  
    Var total = a+b ;  
    Console.log (total) ;  
}
```

incomplete

Why function?
Because, this programme many time used easily

Sum(1) ~~OR~~ ~~Sum(1)~~ ~~Console.log (sum(1)) ;~~
~~Console.log (sum(1)) ;~~

Function is called reusable

1/1

2. Calling function (use & call)

- Defining a function does not execute it.
- A JavaScript function is executed when call function

function sum() {
 var a = 10, b = 10;
 var total = a + b;
 console.log(~~total~~);
}

} Execution

(completed)

sum();

} call

3. Function Parameter Vs Function Arguments

Why parameter

because, the function calling many time ~~value~~ use same result.

Function Parameter

Function parameter are name listed in the function definition.

Function Arguments

Function calling time the value passed to the function.

Parameter

function sum (a, b) {

var total = a + b;

console.log (total);

}

Sum (); \Rightarrow NaN

Sum (20, 30) \Rightarrow 50

Sum (50, 30) \Rightarrow 80

Argument



Why function ?

- You can reuse code. — Define the code once, and use many times.
- You can use the same code many
- * times with different arguments, to produce different values.

OR

A function is a group of reusable code which can be called anywhere in program.

This eliminates the need of writing the same code again & again.

DRY \Rightarrow Do Not Repeat Yourself.

4. Function Expression

Function expression simply means create a function and put into the variable.

```
function sum(a,b) {
```

```
    var total = a+b;
```

```
    console.log(total);
```

```
}
```

```
var funcExp = sum(5,10);
```

incomplete

5. Return keyword

- Reach a return statement, the function will stop executing.
- The return value is "returned" back to the "caller".

Programme

```
function sum(a,b) {
```

```
    return total = a+b;
```

```
}
```

```
var funcExp = sum(5,25);
```

```
console.log('Sum of two no is' + funcExp);
```

complete

Complete

6. Anonymous function

A function expression is similar to and has the same syntax as a function declaration. One can "define"

6. Anonymous function

A function expression is similar to and has the same syntax as a function declaration. One can define "named" function expression (where name the of the expression might be used in the call stack of example)

or "anonymous" function expression

Programme

```
var funcExp = function (a, b) {  
    return total = a + b;  
} } Anonymous  
function  
var sum = funcExp (15, 15);  
console.log ('The sum of number ' + sum);
```