**What is function in JS?**

1. Function is a block of code which performs a specific task.
2. Once the function is defined we can call it N number of times.
3. In JavaScript, functions are first-class objects, because they can be passed to other functions, returned from functions and assigned to a variable also.

**When to use functions?**

* When a block of code is repeated one or more times than we can use functions. which gives us the advantage of reusability.

**Function Syntax:**

function function\_name (parameter1, ...., parameter2) {

Function body

}

* “function” is the key word in JS used to declare the function.
* “{}” this is the block of the function
* “()” this is where we declare of parameters of a function.

Note:

* If the parameter of a function is a primitive type then when we change the parameter inside the function then the variable is not reflected outside the function.

Eg:

function modifyValue(x) {

x = 10;

}

let a = 5;

modifyValue(a);

console.log(a);

* When you pass the object as the parameter,if the function changes the properties of object then it will change the object outside the function also. same goes with an array as well.

Eg:

function myFunc(theObject) {

theObject.make = "Toyota";

}

const myCar = {

make: "Honda",

model: "Accord",

year: 1998,

};

console.log(myCar.make);

myFunc(myCar);

console.log(myCar.make);

**What are the types of functions in JS?**

1. **Named functions**

Eg:

Function sayHi(){

Console.log(“hi”);

}

1. **Anonymous function**

This is a function doesn't have a name and it is assigned to a variable.

Eg:const sayHi = () => {

console.log("Hello, world!");

};

sayHi();

1. **IIFE(Immediately invokes fucntion expression)**

This is a function that is difined and immediately invoked right after defining.

Eg:

(function() {

console.log("This is an IIFE!");

})();

**4.Callback functions**

It is a fucntion where it takes a function as an argument and it is called later time.

Eg:

Function sayHello(sayHi){

Console.log(“Hello”);

sayHi();

}

Function sayHi(){

Console.log(“hi”);

}