Anonymous function:-

Anonymous function is a function that is defined without a name

```
var anonfun=function(){
    return "this is anonymous function";
}
console.log(anonfun());
```

above program prints "this is anonymous function" in the output.it is similar to the named function but the difference is hoisting is not applied,it is also called as function expression.

Arrow function:-

Arrow function is a concise way of writing function in shorter way.

```
var arrowfun=()=>{
    return "this is arrow function";
}
console.log(arrowfun());
```

above program prints "this is arrow function" in the output. It is a also have same functionality , it is also not hoisted.

Callback Function

Callback function is a function definition passed into a another function as an argument which is then invoked inside the outer function to complete some kind of task.

```
function hello1(){
    return "hello1 function is triggered by main function";
}

function hello2(j){
    var a=j();
 return a;
}

console.log(hello2(hello1));
```

in following program hello1 is passed as an argument to a hello2 function .hello2 starts execution line by line. hello2 stores the hello1 function in j . In the next statement variable invokes the function stores the ouput in it and displays the output in a console "hello1 function is triggered by main function".

Higher order function

A higher-order function is a function that either takes one or more functions as arguments or returns a function as its result.

```
function higherOrderFunction(callback) {
 // Perform some operation
 callback();
}

function callbackFunction() {
 console.log("Callback function called");
}
```

```
higherOrderFunction(callbackFunction);
```