



First class Functions

What is an anonymous function?

Function without a name is an anonymous function.

What are first class functions? in js.

Function statement / expression / Declaration.

→ Way of creating a function is called function statement.

Example:

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

→ functions assigned to a variable is called function expression.

Example:

```
var b = function() {  
    console.log("b called");  
}
```

Q → Difference b/w function statement & func-expression. (hoisting)

function statements are hoisted as it is, & whole code of function is present as it is in variable declaration scope, whereas function expressions are hoisted as undefined, just like a normal variable, till it encounter assignment line of function.

function declaration and function statement means same thing.

Anonymous function:
function without a name.

```
function () {  
  }  
}
```

// Don't have their own identity.
// result as syntax error.

Used where functions are used as values.

Example: var x = function () {
 ...
 }
}

but function statement require a function name.

Named function Expression:
giving a name to an anonymous function expression.

Example:

```
var b = function xyz() {  
  ...  
}
```

b(); // Will run function xyz.
xyz(); // Reference error, because not present in scope.

Parameter & Argument:

arguments are passed by a function.

Parameters are values accepted by function.

function a (parameter) {

...

a(argument);

First Class function: / First Class citizens:

The ability of function to be used as values

& can be used to pass on as another func-

& can be returned argument to

to functions.

this ability is called first class functions.

first class functions / first class citizens means the same.

Arrow functions:

function statement / ex. / de. can be implemented using arrow functions, these are introduced in ES6 along with let & const