Examples practice

Print all the numbers from 0 to 100, using while loop

```
var i = 0;
while(i <= 100){
 console.log(i);
 ++i;
}
```

Print all the numbers from 0 to 100, using for loop

```
for(var i = 0; i <= 100 ; ++i){

   console.log(i);

}
```

Increment and Decrement

The increment and decrement operators in JavaScript will add one (+1) or subtract one (-1), respectively, to their operand, and then return a value.

```
// Increment

var a = 1;

console.log(a++);    // 1
console.log(a);      // 2

// Decrement

var b = 1;

console.log(b--);    // 1
console.log(b);      // 0
```

```
// Increment

var a = 1;

console.log(++a);    // 2
console.log(a);      // 2

// Decrement

var b = 1;

console.log(--b);    // 0
console.log(b);      // 0
```

To get the length of the string(text)

```
var txt = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";
var sln = txt.length;
```

Get substring index

```
var str = "Please locate where locate occurs!";
var pos = str.indexOf("locate");
console.log(pos);
```

Output:
7

If .indexOf() gives -1 then substring doesn’t exist

```
var str = "Please locate where locate occurs!";
var pos = str.indexOf("run");
console.log(pos);
```

Output:
-1

Different ways to declare Arrays

```
var cars = ["Saab", "Volvo", "BMW"];
```

OR

```
var car1 = "Saab";
var car2 = "Volvo";
var car3 = "BMW";
var cars = [car1,car2,car3]
```

Access elements inside the Array

```
var cars = ["Saab", "Volvo", "BMW"];
console.log(cars[0]);
console.log(cars[2]);
```

Output:
Saab,
BMW

Note: 0, 1 , 2 are the indexes of elements in array

Access last element in Array

```
var cars = ["Saab", "Volvo", "BMW"];
console.log(cars.length)
```

Output: 3
Note for length counting starts from 1.

```
var cars = ["Saab", "Volvo", "BMW"];
console.log(cars[cars.length - 1]);
```

Output: BMW
Why length - 1, because indexing starts from 0 and counting the size starts from 1.

String can also be accessed through indexes

```
var s = "Iam";
console.log(s[0]);
console.log(s.indexOf("I"));
console.log(s.indexOf("a"));
```

Output:

```
I
0
1
```

Print the names that start with letter ‘A’

```
var cars = ["Ali", "June", "Abi", "Bishop", "Anu"];
for(var i = 0;i < cars.length; i++){
   if(cars[i].indexOf("A") == 0){
      console.log(cars[i]);
   }
}
```

Print the names that start with letter ‘A’

Method 2:

```
var cars = ["Ali", "June", "Abi", "Bishop", "Anu"];
for(var i = 0;i < cars.length; i++){
   if(cars[i][0] == "A"){
      console.log(cars[i]);
   }
}
```

In iteration 1: cars[0] gives “Ali”, so the if condition checks “Ali”[0] which gives 0th position character in string.

Print the number 3 multiplication table

```
var i = 0;
var output = "";
while(i <= 10){
  output = "3 * "+ i + " = " + (3 * i);
  console.log(output);
  ++i;
}
```