

```

1  /***** 13_STANDARD_LOOPS *****/
2
3  /**
4   * LOOPS:
5   * --> Loops can execute a block of code a number of times.
6   * --> Loops are handy, if you want to run the same code over and over
again, each time with a different value.
7   * --> Often this is the case when working with arrays
8   * --> THREE TYPES:
9   *     --> 1. While Loop
10  *     --> 2. Do-While Loop
11  *     --> 3. For Loop
12  */
13
14
15 /**
16  * For Loop
17  */
18
19 let table = 5;
20 for (let i = 1; i <= 10; i++) {
21     console.log(`${table} * ${i} = ${table * i}`);
22 }
23
24 /**
25  * While Loop
26  */
27 table = 11;
28 let i = 1;
29
30 while (i <= 10) {
31     console.log(`${table} * ${i} = ${table * i}`);
32     i++;
33 }
34
35 /**
36  * Do-While Loop
37  * @GOTCHA
38  * --> This Loop Runs Atleast Once In Case of Failure of Condition
39  */
40 i = 50;
41
42 do {
43     console.log('Number: ' + i);
44     i++;
45 }while(i < 10);
46
47 /**
48  * Break & Continue
49  */
50
51 for(let i = 1; i < 11; i++) {
52     if (i === 3) {
53         console.log(`${i} is my favourite number.`);
54         continue;
55     }
56
57     console.log('Number: ' + i);
58 }
59

```

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60 for(let i = 1; i < 11; i++) {
61     if (i === 3) {
62         console.log(`Stopped At ${i}.`);
63         break;
64     }
65
66     console.log('Number: ' + i);
67 }
68
69 /**
70  * Looping Through Arrays
71  */
72 const names = ['Abhishek', 'Dylan', 'Bittu', 'John', 'Jonas'];
73
74 for(let i = 0; i < names.length; i++) {
75     console.log(`${i}: ${names[i]}`);
76 }
77
78 /**
79  * Looping Through Arrays
80  * --> Using 'forEach()' Method
81  */
82 names.forEach(function(name) {
83     console.log(name);
84 });
85
86 /**
87  * 'map()' Function
88  * --> return new Array of modified data
89  */
90 const namesHtml = names.map(function(name) {
91     return `

${name}</p>`;
92 });
93 console.log(namesHtml);
94
95 /**
96  * For-In Loop
97  * --> Used For Objects
98  */
99 const user = {
100     name: 'Abhishek',
101     age: 21,
102     hobby: ['Programming', 'Maths']
103 };
104
105 for(let x in user) {
106     console.log(`${x}: ${user[x]}`);
107 }


```