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1 // # Chapter Four
2 /*****
3 # What is Nasted Loop
4 A composition of loops is called a nested loop. The most common type of
5 nested loops will be one loop inside another. The first loop is usually
6 called the outer loop while the second loop is called the inner loop. The
7 outer loop always executes first, and the inner loop executes inside the outer
8 loop each time the outer loop executes once. Take a look at the example below
9 and visualize how the nested loop works.
10 *****/
11 var n = 5;
12 for (var i = 1; i <= n; i++) {
13     for (var j = 1; j <= i; j++) {
14         console.log(j);
15     }
16 }
17 /***** Output *****/
18 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/4. Chapter_Four
19 $ node "5-nestedLoop.js"
20 1
21 1
22 2
23 1
24 2
25 3
26 1
27 2
28 3
29 4
30 1
31 2
32 3
33 4
34 5
35 -----
36 var n = 5;
37 var i = 1;
38 while (i <= n) {
39     var result = "";
40     var j = 1;
41     while (j <= i) {
42         result = result + j + " ";
43         j++;
44     }
45     console.log(result);
46     i++;
47 }
48
49 /***** Output *****/
50 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/4. Chapter_Four
51 $ node "5-nestedLoop.js"
52 1
53 1 2
54 1 2 3
55 1 2 3 4
56 1 2 3 4 5
57 -----
58
59
60

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61 // Same work to given while loop
62 var n = 5;
63 var i = 1;
64 while (i <= n) {
65     var result = "";
66     var j = 1;
67     while (j <= i) {
68         result = result + j + " ";
69         j++;
70     }
71     console.log(result);
72     i++;
73 }
74 /***** Output *****/
75 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/4. Chapter_Four
76 $ node "5-nestedLoop.js"
77 1
78 1 2
79 1 2 3
80 1 2 3 4
81 1 2 3 4 5
82 -----
83 var n = 10;
84 for (var i = 1; i <= n; i++) {
85     var result = "";
86     for (var j = 1; j <= n; j++) {
87         result = result + "* ";
88     }
89     console.log(result);
90 }
91
92 /***** Output *****/
93 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/4. Chapter_Four
94 $ node "5-nestedLoop.js"
95 * * * * *
96 * * * * *
97 * * * * *
98 * * * * *
99 * * * * *
100 * * * * *
101 * * * * *
102 * * * * *
103 * * * * *
104 * * * * *

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