

* Print elements in waveform :-

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

5x4

O/P :- 1 5 9 13 17 18 14 10 6 2 3
7 11 15 19 20 16 12 8 4

* Solution:-

Even col → Up to down print

Odd col → Down to up print

```
Test.java > ...
1 public class Test {
  Run | Debug
2   public static void main(String[] args) {
3       int[][] arr = {
4           { 1, 2, 3, 4 },
5           { 5, 6, 7, 8 },
6           { 9, 10, 11, 12 }
7       };
8
9       wavePrint(arr);
10  }
11
12  public static void wavePrint(int[][] arr) {
13      for (int col = 0; col < arr[0].length; col++) {
14
15          if (col % 2 == 0) {
16              // Move down
17              for (int row = 0; row < arr.length; row++) {
18                  System.out.print(arr[row][col] + " ");
19              }
20          } else {
21              // Move up
22              for (int row = arr.length - 1; row >= 0; row--) {
23                  System.out.print(arr[row][col] + " ");
24              }
25          }
26      }
27  }
28 }
```

```
mastering-dsa git:(main U:2 ? :2) x java Test
1 5 9 10 6 2 3 7 11 12 8 4
```