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C++ (g++ 5.4)



## Print Like A Wave

Easy • 40/40 • Average time to solve is 20m

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### Problem statement

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For a given two-dimensional integer array/list 'ARR' of size (N x M), print the 'ARR' in a sine wave order, i.e., print the first column top to bottom, next column bottom to top, and so on.

For eg:-

The sine wave for the matrix:-

1 2

3 4

will be [1, 3, 4, 2].

### Detailed explanation (Input/output format, Notes, Images)

#### Constraints :

1 <= T <= 10

1 <= N <= 100

1 <= M <= 100

0 <= ARR[i][j] <= 100

Time Limit: 1sec

```
1 #include <bits/stdc++.h>
2 vector<int> wavePrint(vector<vector<int>> arr,
3 {
4     vector<int> ans;
5     for(int i = 0 ; i < mCols ; i++)
6     {
7         if(i%2==0)
8         {
9             for(int j = 0 ; j < nRows ; j++)
10             {
11                 ans.push_back(arr[j][i]);
12             }
13         }
14         else
15         {
16             for(int j = nRows-1 ; j >= 0 ; j--)
17             {
18                 ans.push_back(arr[j][i]);
19             }
20         }
21     }
22     return ans;
23 }
24
25 }
```

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