

ALGORITHM

- Step-1 :- START
- Step-2 :- Create a class named as sort.
- Step-3 :- Create a method named as sort and pass the integer type array a[] as parameter. In this function, create a for loop (from 0 to the length of the array), start a inner loop (from 0 to a.length-1-i) and check whether a[j] > a[j + 1], if true then swap them if they are not in the desired order.
- Step-4 :- Create a method named as main. In this function, create an integer type array a[] and store the elements in it (user input). Call the function sort and pass the array a[] as the parameter. Print the sorted array. Create a 2-Dimensional array b[][] and store the elements of sorted array a[] in the required pattern using for-loops. Now print the 2-Dimensional array b[][].
- Step-5 :- END

VD TABLE

| Sr. No. | Variable | Data Type | Description |
|---------|----------|-----------|--|
| 1 | i | int | To store the value of the loop variable |
| 2 | j | int | To store the value of the loop variable |
| 3 | a | int[] | To store the elements of the array |
| 4 | b | int[][] | To store the elements of the array in the required pattern |
| 5 | n | int | To store the size of the array |
| 6 | temp | int | To store the temporary value |
| 7 | k | int | To store the value of the loop variable |
| 8 | r | int | To store the value of the loop variable |

OUTPUT

```
BlueJ: Terminal Window - basic
Options
ENTER VALUE OF N: 3
ENTER ELEMENTS OF SINGLE DIMENSIONAL ARRAY:
3 1 7
SORTED ARRAY:
1 3 7
FILLED MATRIX:
1 3 7
1 3 1
1 1 3
```