

Homework-2

Assignment Date : 23.11.2020
 Due Date : 30.11.2020 at 18:00
 Duration : 1 week

Write a C program to do the followings.

- Define an integer **matrix** (two-dimensional array) with 10 rows and 2 columns.
- Initialize the matrix elements with the following unsorted data.

First column	Second column
10	8
5	14
10	23
25	7
8	30
14	16
6	13
5	10
25	6
4	15

- By loopings, apply the **Bubble Sort** method to sort the columns of the matrix, as described below.
 - The **first column** of matrix should be sorted in **ascending** order (increasing order).
 - The **second column** of matrix should be sorted in **descending** order (decreasing order).
- After the sorting operations, display the **sorted matrix** on screen.
- Also display the **transpose** of the **sorted matrix** on screen.
 (Transpose means rows and columns are exchanged.)
- User will **not** enter any data inputs from keyboard.

EXAMPLE SCREEN OUTPUT

```

SORTED MATRIX :
First column is in ascending order.
Second column is in descending order.

4  30
5  23
5  16
6  15
8  14
10 13
10 10
14  8
25  7

TRANSPOSE OF SORTED MATRIX :

4  5  5  6  8  10  10  14  25
30 23 16 15 14 13 10  8  7
    
```