

## SET A

```
import numpy as np

def ifSorted(arr1, column):
    flag = True
    row = arr1.shape[0]
    for i in range(row-1):
        if(arr1[i][column]>arr1[i+1][column]):
            flag = False
            break;
    return flag

def addSorted(arr1):
    sum = 0
    row, col = arr1.shape
    for c in range(col):
        if(ifSorted(arr1, c) == True):
            for r in range(row):
                sum+= arr1[r][c]
    return sum
```

## SET B

```
import numpy as np

def ifSorted(arr1, column):
    flag = True
    row = arr1.shape[0]
    for i in range(row-1):
        if(arr1[i][column]<arr1[i+1][column]):
            flag = False
            break;
    return flag

def addSorted(arr1):
    sum = 0
    row, col = arr1.shape
    for c in range(col):
        if(ifSorted(arr1, c) == True):
            for r in range(row):
                sum+= arr1[r][c]
    return sum
```

[N.B: If the students use any other way of solving the question, please use your own discretion to properly assess and grade their quiz.]

SL.	Points to Meet	Marks (15)
1	Imports numpy	1
2.	Defines the function properly	1
3.	Finds the shape of 2D array properly	1
4.	Initializes a variable for sum	1
5.	Iteration of the array column wise	2
6.	Uses proper techniques to check if the column is sorted	4
7.	Adds the sum properly when column is sorted	4
8.	Prints or returns Sum variable	1
Total points:		15