## **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** |
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## **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** |
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**[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) |
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|  | **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** |