Lab#5

Submission deadline: 5ᵗʰ April, 2020, Sunday till 11:59pm
Submission guidelines:

- Put all your .cpp files in a folder. Zip that folder and name it with your roll number.
- Email the zipped folder at **natalia@pucit.edu.pk**. You must put the **subject** of your email as:
  "Lab#5"
- Students who are facing issues with their laptop or compiler can write the code on paper and send the screenshots, following the above guideline. Since your issue will be genuine therefore relaxation will be given accordingly. Don't worry!

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1. Write a program that detects whether a given 2x2 matrix is identity or not. You need to take the matrix as an input from the user.

2. Write a program that finds an equilibrium index of an array. An index of an array is said to be equilibrium index if the sum of the elements on its lower indexes is equal to the sum of elements at higher indexes. For Example:
   A[] = {-7, 1, 5, 2, -4, 3, 0} Output : 2 is an equilibrium index, because: A[0] + A[1] + A[2] = A[4] + A[5] + A[6] = 1 If no equilibrium index is found then your program should return -1.