*ASSIGNMENT QUESTIONS*

Q1). Print the average of three numbers entered by user by creating a class named ‘Dit’ having a method to calculate and print the average.

Q2). Write a java program to sort a numeric array and string array.

Q3). In the strong room of ABC bank there are N vaults in a row. The amount of money

inside each vault displayed on the door. You can empty any number of vaults as long as

you do not empty more than 2 out of any 5 adjacent vaults. For example, of the vaults 1, 2,

3, 4, 5, if you empty 4 and 5, then you cannot empty any of the vaults 6, 7 or 8 but you can

empty 9th vault. If you attempt to break more than 2 of any 5 adjacent vaults, an alarm

sounds and the sentry, a sharp shooter will kill you instantly with his laser gun!

The output is the maximum amount of money that can be emptied without sounding the

alarm

**Input :**

The first line contains an integer N which is the number of vaults. The next line has a sequence of positive integers of length N, giving the amount of cash in the vaults in order.

**Output :**

The maximum amount of money that can be looted without sounding the alarm.

Q4). A sequence is said to be progressive if it doesn’t decrease at any point in time.  
For example 1 1 2 2 is a progressive sequence but 1 2 1 is not a progressive sequence. Let S be the sequence and be represented by L spaced integers Ki, now your task is to find out the first longest progressive sequence present in the given sequence (S).

Sequence (S) = 2 3 4 5 5 6 7 2.

Q5). Write a java program to find the common elements between two arrays of integers.