

Online 2 (Loops)

Section B2

Marks: 20

Time: 50 minutes

Problem 1 (Marks: 10)

Write a program to compute the sum of the following series upto n th term using loop. The value of n will be given as input.

$$1 - 2/3 + 3/7 - 4/13 \dots$$

Sample Input(s)	Corresponding Output(s)
2	0.333333
4	0.454212

Problem 2 (Marks: 10)

Write a program to count the number of distinct integers from a sorted sequence of integers. **You cannot use any array to do this task.**

The first line of input will consist of a value n . In the next line, there will be n integers which are sorted in either ascending or descending order.

Sample Input(s)	Corresponding Output(s)
7 30 30 50 50 50 60 70	4
8 70 60 60 60 50 50 50 30	4