

**Problem 1 (Marks: 10)**

Write a C program that reverses the digits of a given integer. You have to store the reversed integer in a variable before showing it as output. You MUST NOT use any library function other than the I/O functions.

Sample input	Sample output
Enter an integer: 1234	The reversed integer is: 4321
Enter an integer: -947	The reversed integer is: -749
Enter an integer: 121	The reversed integer is: 121

**Problem 2 (Marks: 10)**

Write a C program that takes as input a **non-negative** integer n, and outputs the sum of the following series upto the n-th term. You MUST NOT use nested-loops or, series summation formula for calculating the sum.

$$1 - (1+3) + (1+3+5) - (1+3+5+7) + \dots \dots \dots$$

Sample input	Sample output
Enter number of terms: 1	Result: 1
Enter number of terms: 0	Result: 0
Enter number of terms: 3	Result: 6

**Submission deadline:** May 6, 2018, start of the Lab time **at 11:00 am**

You should bring the C files (.c extension) of your offline programs to the lab in one folder (folder name should be your **student ID**). Also, bring a printed copy of your programs.