NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Department of Chemical Engineering
I B.Tech., II Semester
Exam-1, May 2023

Sub : Problem Solving and Computer Programming (CS181)   Date: 20-05-2023
Time : 1 Hr.   Max. Marks: 15

Answer all questions

Note that don't use arrays for any question, if you write the program using arrays you won't get any marks for that.

Q.No.		Marks
1	There are 'n' farmers in a village. They cultivate paddy in their agriculture lands. They all send their paddy to a miller. The miller said that 76kgs of paddy is considered as one bag. Each farmer has given his paddy to the miller. Write a program to read the paddy of each farmer and display the total number of bags and kgs of the paddy of that village. Note that each farmer enters two integers: first one represents the bags and the second one represents the number of kgs. Example: Enter the number of farmers: 4 Enter the amount of paddy of farmer 1: 16 20 (i.e 16 bags 20 kgs) Enter the amount of paddy of farmer 2: 12 42 (i.e 16 bags 20 kgs) Enter the amount of paddy of farmer 3: 14 25 (i.e 16 bags 20 kgs) Enter the amount of paddy of farmer 4: 16 0 (i.e 16 bags 20 kgs) Output: The total number of paddy from this village is: 59 bags 11 kgs.	4
2	Write a C++ program to display the leap years that contain the digit 'x' given by the user, between two given year n1 and n2 both inclusive. For example, if n1 and n2 are 1990 and 2020 and if the digit 'x' is 6, the outputs need to be: The number of leap years between 1990 and 2020 that contains the digit 6 are: 1996, 2016.	4
3	Write a C++ program that reads 4 no.'s and prints in non-decreasing order.	4
4	Write a C++ program to print Floyd's Triangle. Example: If no. of rows=5 　1 　0 1 　1 0 1 　0 1 0 1 　1 0 1 0 1	3