

Sheet 2

Deadline 23/3/2020

1. Write a C++ program to Check if a year is leap year or not. (using switch case)

Note: All years which are divisible by 4 are leap years except for century years (years ending with 00) whose number is not divisible by 400.

-
2. Write a C++ program to input all sides of a triangle and check whether triangle is valid or not.(using switch case)

Note: sum of 2 sides of a valid triangle is greater than the third side.

-
3. Write a program to calculate the monthly telephone bills as per the following rule:

- Minimum 200 pound for up to 100 minutes.
- Plus 0.60 pound per minute for next 50 minutes.
- Plus 0.50 pound per minute for next 50 minutes.
- Plus 0.40 pound per minute for any minutes beyond 200 calls.

-
4. A student will not be allowed to sit in exam if his/her attendance is less than 75%.

Take following input from user:

- Number of classes held
- Number of classes attended.

And print percentage of class attended. Is student is allowed to sit in exam or not.

5. Write a C++ program to print numbers divisible by 7 and not divisible by 5 for integers from 1 to 100. (Using for loop).

6. Print the count and sum of all integer numbers divisible by 9 for the integers from 1 to 100.

7. Write a C++ program to Print the following sequences:

{1, 2, 4, 8, 16, 32, 64, 128, 256}

{1, 4, 9, 16, 25, 36 ... 121}

8. Write a program in C++ to check whether a number is prime or not.

9. C++ Program to find factorial of a number using for loop

(Factorial on n = 1*2*3*...*n)

10. Write a program in C++ to display the first n terms of Fibonacci series.

1 1 2 3 5 8 13 21 34.....

11. Program that accept 2 numbers from the user and calculate sum of numbers between them(including the entered numbers)