Assignment_04

1. **Write a C program to check whether a number is negative, positive or zero.**
   Ex:
   Input: -45   0   12
   o/p: Negative   Zero   Positive

2. **Write a C program to check whether a number is even or odd.**
   Ex:
   Input: 128   171
   o/p: Even   Odd

3. **Write a C program to input any character and check whether it is alphabet, digit or special character.**
   Ex:
   Input: A   m   9   @
   o/p: Alphabet   Alphabet   Digit   Special character

4. **Write a C program to check whether a character is uppercase or lowercase alphabet.**
   Ex:
   Input: M   k
   o/p: Uppercase   Lowercase

5. **Write a C program to enter month number and print total number of days in month. (Excluding Leap Year)**
   Ex:
   Input: 6   7
   o/p: 30 Days   31 Days

6. **Write a C program to input angles of a triangle and check whether triangle is valid or not.**
   Ex:
   Input: 30, 60, 90   45, 45, 100   o/p:
Valid   Invalid

7.**Write a C program to find all roots of a quadratic equation.**
   Ex: Input
      Input a: 8
      Input b: -4
Input c: -2
   o/p: Root1: 0.80   Root2: -0.30

8.   **Write a C program to check whether triangle is equilateral, scalene or isosceles   Input: all side's Length**

   Ex: side1   side2   side3   Triangle
            1.   30   30   30   Equilateral

2. 12   6   8   Scalene
3. 8   8   10   Isosceles

9.   Write a C program to input electricity unit charges and calculate total electricity bill according to the given   condition:
For first 50 units Rs. 0.50/unit
For next 100 units Rs. 0.75/unit
For next 100 units Rs. 1.20/unit
For unit above 250 Rs. 1.50/unit
An additional surcharge of 20% is added to the bill

Ex:
   Unit   Bill
      1.   50   30.00
      2.   120   93.00
      3.   256   274.80
      4.   12   7.20

10.   Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics   and Computer.
Calculate percentage and grade according to following:

Percentage >= 90% : Grade A   Percentage
>= 80% : Grade B
Percentage >= 70% : Grade C
Percentage >= 60% : Grade D
Percentage >= 40% : Grade E
Percentage < 40% : Grade F

Ex:
Input
Input marks of five subjects: 95
95
97
98
90
o/p: Percentage = 95.00
       Grade A