

## **Programming problems using Conditional Operators**

1. Write a C program to find maximum between two numbers.
2. Write a C program to find maximum between three numbers.
3. Write a C program to check whether a number is negative, positive or zero.
4. Write a C program to check whether a number is divisible by 5 and 11 or not.
5. Write a C program to check whether a number is even or odd.
6. Write a C program to check whether a year is leap year or not.
7. Write a C program to check whether a character is alphabet or not.
8. Write a C program to input any alphabet and check whether it is vowel or consonant.
9. Write a C program to input any character and check whether it is alphabet, digit or special character.
10. Write a C program to check whether a character is uppercase or lowercase alphabet.
11. Write a C program to input week number and print week day.
12. Write a C program to input month number and print number of days in that month.
13. Write a C program to count total number of notes in given amount.
14. Write a C program to input angles of a triangle and check whether triangle is valid or not.

15. Write a C program to input all sides of a triangle and check whether triangle is valid or not.
16. Write a C program to check whether the triangle is equilateral, isosceles or scalene triangle.
17. Write a C program to find all roots of a quadratic equation.
18. Write a C program to calculate profit or loss.
19. Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:

Percentage  $\geq 90\%$  : Grade A

Percentage  $\geq 80\%$  : Grade B

Percentage  $\geq 70\%$  : Grade C

Percentage  $\geq 60\%$  : Grade D

Percentage  $\geq 40\%$  : Grade E

Percentage  $< 40\%$  : Grade F

20. Write a C program to input basic salary of an employee and calculate its Gross salary according to following:

Basic Salary  $\leq 10000$  : HRA = 20%, DA = 80%

Basic Salary  $\leq 20000$  : HRA = 25%, DA = 90%

Basic Salary > 20000 : HRA = 30%, DA = 95%

21. 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

22. Write a C program to find maximum between two numbers using conditional operator.

23. Write a C program to find maximum between three numbers using conditional operator.

24. Write a C program to check whether a number is even or odd using conditional operator.

25. Write a C program to check whether year is leap year or not using conditional operator.

26. Write a C program to check whether character is an alphabet or not using conditional operator.

27. Write a C program to perform input/output of all basic data types.

28. Write a C program to enter two numbers and find their sum.

29. Write a C program to enter two numbers and perform all arithmetic operations.
30. Write a C program to enter length and breadth of a rectangle and find its perimeter.
31. Write a C program to enter length and breadth of a rectangle and find its area.
32. Write a C program to enter radius of a circle and find its diameter, circumference and area.
33. Write a C program to enter length in centimeter and convert it into meter and kilometer.
34. Write a C program to enter temperature in Celsius and convert it into Fahrenheit.
35. Write a C program to enter temperature in Fahrenheit and convert to Celsius
36. Write a C program to convert days into years, weeks and days.
37. Write a C program to find power of any number  $x^y$ .
38. Write a C program to enter any number and calculate its square root.
39. Write a C program to enter two angles of a triangle and find the third angle.
40. Write a C program to enter base and height of a triangle and find its area.
41. Write a C program to calculate area of an equilateral triangle.
42. Write a C program to enter marks of five subjects and calculate total, average and percentage.

43. Write a C program to enter P, T, R and calculate Simple Interest.

44. Write a C program to enter P, T, R and calculate Compound Interest.