

1. write a C program to check whether a number is even or odd.
2. write a C program to check whether a number is divisible by 5 and 11 or not.
3. write a C program to check whether a number is negative, positive, or zero.
4. write a C program to find maximum between three numbers.
5. write a C program to check whether a year is a leap year or not.
6. write a C program to check whether a character is an alphabet or not.
7. write a C program to input any alphabet and check whether it is vowel or consonant.
8. write a C program to input any character and check whether it is alphabet, digit, or special character.
9. write a C program to check whether a character is uppercase or lowercase alphabet.
10. write a C program to input month number and print number of days in that month.
11. write a C program to count the total number of notes in a given amount.
12. write a C program to input marks of five subjects (Physics, Chemistry, Biology, Mathematics, and Computer). Calculate percentage and grade according to the 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

13. write a C program to input the basic salary of an employee and calculate its Gross salary according to the following:

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

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

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

14. write a C program to input electricity unit charges and calculate the total electricity bill according to the given condition:

For the first 50 units: Rs. 0.50/unit

For the next 100 units: Rs. 0.75/unit

For the next 100 units: Rs. 1.20/unit

For units above 250: Rs. 1.50/unit

An additional surcharge of 20% is added to the bill.

15. write a program that solves a quadratic equation of the form $ax^2 + bx + c = 0$ where the user provides values for a, b, and c. If it's impossible to calculate the roots because of a division by zero or a square root of a negative number, print "No real root"; otherwise, print the answers.
16. write a program that takes three integers as input, representing the sides of a triangle, and determines if it's a right triangle. If so, determine whether the triangle is equilateral, isosceles, or scalene.
17. write a program that takes three angles (in degrees) as input and determines whether they can form a valid triangle. If they can, classify the triangle as equilateral, isosceles, or scalene.
18. write a program that takes an integer number as input, which is greater than 99 and less than 1000. Print the first digit of the number. As an example, if the input number is 253, print 2.

19. write a program to check whether the number is a perfect square number or not.
20. write a program that takes an integer number as input, which is less than 100, to check whether the number is a Harshad number or not. A Harshad number is an integer divisible by the sum of its digits.
21. Read four integer values A, B, C, and D. Then, if B is greater than C and D is greater than A and if the sum of C and D is greater than the sum of A and B, and if C and D are positive values and A is even, print YES; otherwise, print NO.