

1. Write a program to check if a given number is positive, negative, or zero.
2. Write a program to determine if a person is eligible to vote based on their age (18 or above).
3. Write a program to find the maximum between three numbers using if-else statements.
4. Write a program to check if a year is a leap year or not.
5. Write a program to determine if a student has passed or failed based on their marks (pass mark: 40).
6. Write a program to check if a character is a vowel or consonant.
7. Write a program to determine if a given number is even or odd.
8. Write a program to calculate electricity bill based on units consumed:
 - First 100 units: Rs. 10/unit
 - Next 100 units: Rs. 15/unit
 - Above 200 units: Rs. 20/unit
9. Write a program to check if a triangle is equilateral, isosceles, or scalene based on its sides.
10. Write a program to calculate grade based on percentage:
 - Above 90%: A
 - 80-89%: B
 - 70-79%: C
 - 60-69%: D
 - Below 60%: F
11. Write a program to determine if a given character is an alphabet, digit, or special character.

12. Write a program to calculate income tax based on annual salary:

- Up to 300,000: No tax
- 300,001-600,000: 5%
- 600,001-900,000: 10%
- Above 900,000: 15%

13. Write a program to check if a number is divisible by both 5 and 11.

14. Write a program to determine the type of triangle (right-angled, acute, or obtuse) based on its angles.

15. Write a program to calculate the total cost of a purchased item including discount:

- Purchase above 5000: 20% discount
- Purchase 2000-5000: 10% discount
- Purchase below 2000: 5% discount

16. Write a program to find the number of days in a month using month number.

17. Write a program to determine if entered three digits can form a valid date (DD/MM/YY).

18. Write a program to check if a person is underweight, normal, overweight, or obese based on their BMI:

- Below 18.5: Underweight
- 18.5-24.9: Normal
- 25-29.9: Overweight
- Above 30: Obese

19. Write a program to determine the cheapest shipping method based on package weight:

- Standard: \$5 per kg
- Express: \$10 per kg
- Premium: \$15 per kg

Choose the cheapest option if delivery time is not a concern.

20. Write a program to calculate final exam grade needed to achieve desired course grade:

- Course work: 40% of total
- Final exam: 60% of total

Calculate required final exam score to achieve desired overall grade.