Else-if Problem Solving Question

1. In this program user is asked to enter the age and based on the input, the if..else statement checks whether the entered age is greater than or equal to 18. If this condition meets then display the message "You are eligible for voting", however, if the condition doesn't meet then show a different message "You are not eligible for voting".

2. C program to enter student marks and find percentages and grade
   A college has the following rules for the grading system:

- Below 25 – F
- 25 to 45 – E
- 45 to 50 – D
- 50 to 60 – C
- 60 to 80 – B
- Above 80 – A

3. C program to check whether a character is an alphabet or not.

4. C program to check whether a number is a prime number or not.

5. C program to check the sign of a given number

6. Check whether the triangle is equilateral, scalene, or isosceles.
   Note: Before writing the program, we should know the properties of isosceles, equilateral, and scalene triangles.
   Isosceles triangle: In geometry, an isosceles triangle is a triangle that has two sides of equal length.
   Equilateral triangle: In geometry, an equilateral triangle is a triangle in which all three sides are equal.
   Scalene triangle: A scalene triangle is a triangle that has three unequal sides.

7. Write a C program to read the age of a candidate and determine whether he is eligible for casting their own vote.

8. Write a C program to read the value of an integer m and display the value of n is 1 when m is larger than 0, 0 when m is 0, and -1 when m is less than 0

9. Write a C program to calculate the root of a Quadratic Equation

10. Write a program in C to read any day number in an integer and display the day name in the word.

11. Write a C program to find the Second largest among four numbers.

12. Write a C program to accept the height of a person in centimeters and categorize the person according to their height.

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

How to calculate electricity bills using if else in C programming. Program to find electricity bill using if else in C. Logic to find net electricity bill in C program.

14. Take two integers indicating the x and y coordinate of a two- dimensional graph paper where the center point is x = 0 and y = 0. Now print the quadrant of the given point.
- If the user gives input (4, 5) you should print `First quadrant`;
- If the user gives input (-4, -5) you should print `Third quadrant`;

15. Write a C program to input the amount from the user and print a minimum number of notes (BDT. 500, 100, 50, 20, 10, 5, 2, 1) required for the amount. How to the minimum number of notes required for the given amount in C programming. Program to find a minimum number of notes required for the given denomination. Logic to find a minimum number of denominations for a given amount in the C program.

16. Write a C program to read roll no, name, and marks of three subjects and calculate the total, percentage, and division:
- Input the Roll Number of the student:784.
- Input the Name of the Student: James.
- Input the marks of Physics, Chemistry and Computer Application: 70 80 90

Expected Output :
- Roll No: 784,
- Name of Student: James,
- Marks in Physics: 70,
- Marks in Chemistry: 80,
- Marks in Computer Application: 90,
- Total Marks = 240,
- Percentage = 80.00,
- Division = First

17. Write a program in C which is a Menu-Driven Program to compute the area of the various geometrical shape.
18. C program with Conditional statement to convert temperature from Fahrenheit to Celsius and Celsius to Fahrenheit.
    - Press c to convert the temperature from Fahrenheit to Celsius.
    - Press f to convert temperature from Celsius to Fahrenheit
19. C program to enter student marks and find percentages and grades.
20. Write a C program to check whether a number is perfectly Square or not.
21. A Company Decided to give a bonus of 5% to the employee if their year if service is more than 5 years. Ask Employees for their salary and year of service and print the net bonus amount.
22. A student will not be allowed to sit in the exam if his/her attendance is less than 75%. Take the following input from the user: { Number of classes held & The number of classes he/she attended.} And print the percentage of classes he/she attended and verify is the student is allowed to sit in the exam or not?
23. A shop will give a discount of 10% if the cost of the purchased quantity is more than 1000. Ask the user for quantity. Judge and print the total cost for the user.
24. Ask the user to enter age, and sex (M or F), and then using the following rules print their place of service.
    if the employee is female, then she will work only in urban areas.
    if the employee is a male and his age is between 20 to 40 then he may work anywhere
    if the employee is male and his age is between 40 t0 60 then he will work in urban areas only.
    And any other input of age should print "ERROR".
25. Calculate profit or loss by using the if-else statement. Take these inputs from the user:
    Cost Price
    Selling Price
    Output: enter cost price: 400, enter selling price: 200,loss of 200
26. Write a program to find the maximum between three numbers.
27. Write a program to check the alphabet, digit, or character.

28. Write a C program to input the month number and print the number of days in that month.
29. Write a C program to find out BMI.
30. Write a C program to input mark and show its GPA value.
31. Write a C program to accept a coordinate point in an XY coordinate system and determine in which quadrant the coordinate point lies.
32. Write a C program to find out the leap year.
33. Write a C program to check whether a number is divisible by 5 and 11 or not.
34. Write a C program to input the week numbers and print the weekday.
35. Write a C program to find all roots of a quadratic equation.
36. Write a C program to input a character from the user and check whether the character is uppercase or lowercase alphabet using if-else. How to check uppercase and lowercase using if else in C programming. Logic to check uppercase and lowercase alphabets in the C program.
37. Write a C program to check whether a triangle is valid or not if angles are given using if-else. How to check whether a triangle can be formed or not, if its angles are given using if else in C programming. Logic to check triangle validity if angles are given in the C program.
38. Write a C program to enter the month number between(1-12) and print the number of days in the month using if-else. How to print a number of days in a given month using if else in C programming. Logic to find the number of days in a month the in C program.
39. Write a C program to input the week number(1-7) and print the corresponding day of the week name using if-else. How to print the day of the week using if else in C programming. Logic to convert a week number to a day of the week in C programming.
40. Write a C program to input a character from the user and check whether a given character is the alphabet, digit, or special character using if-else. How to check if a character is an alphabet, digits, or any other special character using if else in C programming. Logic to check alphabet, digit, or special character in C programming.
41. Write a C program to check positive, negative, or zero using simple if or if-else. C program to input any number from the user and check whether the given number is positive, negative, or zero. Logic to check negative, positive, or zero in C programming.

42. Write a C program to check leap year using if-else. How to check whether a given year is a leap year or not in C programming. C Program to input the year from the user and check whether the given year is a leap year or not using a ladder if-else. Logic to check leap year in C programming.

43. Write a C program to calculate profit or loss.

44. Write a C program to count the total number of notes in a given amount.

45. Write a C program to input the angles of a triangle and check whether a triangle is valid or not.

46. Write a C program to input all sides of a triangle and check whether a triangle is valid or not.