**Lab Task:**

**Question 1:**

Create a program that checks if a person is eligible to vote based on their age and citizenship status.

**Question 2:**

Check if a triangle is valid based on its three angles, where the sum must be exactly 180 degrees and all angles must be positive.

**Question 3:**

Write a C program that uses the ternary operator to determine the letter grade of a student based on their percentage. The grading scale is as follows:

* A for percentages 90 and above
* B for percentages 80 to 89
* C for percentages 70 to 79
* D for percentages 60 to 69
* F for percentages below 60

**Question 4:**

Write a C program that uses the ternary operator to determine if a customer is eligible for a discount based on their total purchase amount and membership status. The discount is applied if the purchase amount is above $100 and the customer has a membership.

**Question 5:**

Write a C program that checks even or odd by using Bitwise operation.

**Question 6:**

Create a program that counts the number of 1s in the binary representation of a number.

**Question 7:**

Create a program that calculates the sum of digits of a number until the result is a single digit (e.g., 123 -> 6).