

## **1. Simple Calculator**

- Write a program that takes two numbers and a mathematical operator (+, -, \*, /) from the user, performs the corresponding operation, and prints the result.

## **2. Check Leap Year**

- Create a program that asks the user for a year and checks if it's a leap year (i.e., divisible by 4, but not divisible by 100, unless divisible by 400).

## **3. Temperature Converter**

- Write a program to convert temperatures between Celsius and Fahrenheit based on the user's input.

## **4. Sum of Digits**

- Create a program that takes a positive 3 digits integer and calculates the sum of its digits.

## **5. Reverse a Number**

- Write a program that reads a 4 digits number from the user and prints its reverse (e.g., input 1234, output 4321).

## **6. Find the Largest of Three Numbers**

- Ask the user to input three numbers and determine the largest one using if-else statements.

## **7. Palindrome Checker**

- Write a program that checks whether a given string or number is a palindrome (reads the same forwards and backwards).

## **8. Fibonacci Sequence**

- Create a program that generates and prints the first n numbers of the Fibonacci sequence, where n is provided by the user.

## **9. Prime Number Checker**

- Write a program that checks if a given number is prime (only divisible by 1 and itself).

## **10. Simple Interest Calculator**

- Create a program to calculate simple interest. The user inputs the principal, rate of interest, and time in years, and the program outputs the interest.

## **11. Sum of Natural Numbers**

- Write a program that takes a positive integer nnn and calculates the sum of all natural numbers up to nnn.

## **12. Power of a Number**

- Implement a program that calculates the result of raising a base to an exponent (both provided by the user), using a loop (e.g.,  $xxx^yyy$ ).

## **13. Multiplication Table Generator**

- Create a program that generates the multiplication table for a given number up to 10.