1.Develop a simple calculator that takes two numbers and an operation (addition, subtraction, multiplication, division) as input. Perform the corresponding operation and display the result.

2.Implement a program that checks if a given year is a leap year or not. The program should prompt the user to enter a year and then output whether it's a leap year or not based on the leap year rules.

3.Write a program that takes a student's score as input and determines the corresponding letter grade. Use the typical grading scale (A, B, C, D, F).

4.Write a program that prompts the user to enter a temperature in Celsius. Based on the entered temperature, the program should decide whether it's a hot, moderate, or cold day and display an appropriate message.

5.Create decision-making logic for the computer player to analyse the board and make strategic moves based on the current game state.

6.Create a program that calculates the Body Mass Index (BMI) based on the user's weight and height. Depending on the calculated BMI, classify the user as underweight, normal weight, overweight, or obese.

7.Simulate a coin flip by generating a random outcome (heads or tails). Ask the user to predict the outcome and determine whether the prediction was correct.