Assignment Day 1

1. Write a program that determines whether a given number is positive or negative.

Write a program that checks if a number is even or odd.

Write a program to determine the greater of two numbers.

4. Suppose we need to assign different grades to students based on their

- If a student scores above 91-100, assign grade A.
- If a student scores above 81-90, assign grade B.
- If a student scores above 71-80, assign grade C.
- If a student scores above 61-60, assign grade C.
- Other wise fail

5. Write a program that calculates the ticket price based on age with the following conditions: age below 12 pay a ticket price of 5, age below 18 pay a ticket price of 10, age below 60 pay a ticket price of 20, age over 60 play a ticket price of 15.

Write a program that determines if a year is a leap year.

Write a program that calculates a discount based on the purchase amount.Prices equal or over 100 discount have a discount of 20. Prices equal or over 50 have a discount of 10. Otherwise discount is 0

8. Write a program that greets the user based on the time of day. Display good morning, good afternoon or good evening based on the time of day when you run the code.

9. Write a program that calculates the Body Mass Index (BMI) and categorizes it. The formula for BMI is: weight / (height * height).

10. Write a simple number guessing game. Provide a secret number and a guess. Based on those numbers give players clues if their guess is higher, lower or correct.