Day 6: Conditional Statements Test

Multiple Choice Questions (MCQs)

1. What is the correct syntax for an if statement in Python? (More than 1 option)
   a) if x > 5 then:
   b) if (x > 5):
   c) if x > 5:
   d) if x > 5;

2. What will be the output of the following code?

```python
x = 10
if x > 5:
    print("Greater than 5")
elif x < 5:
    print("Less than 5")
else:
    print("Equal to 5")
```

   a) Greater than 5
   b) Less than 5
   c) Equal to 5
   d) Error

3. Which of the following is NOT a valid way to use an if statement?
   a) if x == 10:
   b) if x = 10:
   c) if x != 10:
   d) if x >= 10:

4. What keyword is used to check multiple conditions in Python?
   a) elseif
   b) elif
   c) else if
   d) ifelse

5. What will be the output of the following code?

```python
x = 0
if x:
    print("True")
else:
    print("False")
```

   a) True
   b) False
   c) 0
   d) None

Practical Questions

1. Write a Python program that takes an integer input from the user and checks whether it is positive, negative, or zero using if, elif, and else statements.

2. Write a Python program that determines whether a given year is a leap year. A year is a leap year if it is divisible by 4 but not by 100, except when it is also divisible by 400.

3. Given a variable `marks`, write a Python program that assigns grades based on the following conditions:

   - Marks >= 90: Grade A

   - Marks >= 80: Grade B

   - Marks >= 70: Grade C

   - Marks >= 60: Grade D

   - Marks < 60: Grade F