


Assignment: Python if Conditional Statements

 Module: Python if Conditional Statements

 Objective:

To practice Python's decision-making statements and write logic-based programs using:

- if
- if-else
- if-elif-else
- nested if

By completing this assignment, learners will:

- ✓ Understand how conditional logic works
- ✓ Learn to combine comparisons and logical operators
- ✓ Gain confidence in writing decision-based programs

Assignment Tasks

Q1. Basic if Statement

Write a Python program that checks if a number is positive.

✓ Example Input:

Enter a number: 5

✓ Example Output:

The number is positive

Q2. if-else Example

Write a program that accepts a number and prints whether it is even or odd.

✓ Example Input:

Enter a number: 8

✓ Example Output:

8 is even

Q3. if-elif-else Ladder

Write a program that accepts a student's marks and prints:

- Distinction if marks ≥ 75
- First Class if marks ≥ 60
- Second Class if marks ≥ 50
- Fail otherwise

✓ Example Input:

Enter marks: 68

✓ Example Output:

Result: First Class

Q4. Nested if

Write a program that accepts a number and:

- If the number is positive
 - Check if it is even or odd
- Else print "Number is not positive"

✓ Example Input:

Enter number: 6

✓ Example Output:

6 is positive and even

Q5. Largest of Three Numbers

Write a program to input three numbers and print the largest number.

✓ Example Input:

Enter three numbers: 10 25 8

✓ Example Output:

25 is the largest number

Q6. Grading System

Accept marks out of 100 and assign grades:

- A: 90–100
- B: 80–89
- C: 70–79
- D: 60–69
- F: below 60

✓ Example Input:

Enter marks: 72

✓ Example Output:

Grade: C

Q7. Vowel or Consonant

Write a Python program to check whether an input alphabet is a vowel or consonant.

✓ Example Input:

Enter a letter: e

✓ Example Output:

e is a vowel

Q8. Leap Year Checker

Write a program that checks if a given year is a leap year.

✓ Rules:

- Divisible by 4 → Leap year
- But divisible by 100 → Not leap year
- Unless also divisible by 400 → Leap year

✓ Example Input:

Enter year: 2024

✓ Example Output:

2024 is a leap year

Q9. Simple Calculator (if-elif)

Accept two numbers and an operator (+, -, *, /). Perform the operation using if-elif.

✓ Example Input:

Enter first number: 10

Enter second number: 5

Enter operator: *

✓ Example Output:

Result: 50

Q10. Eligibility Check

Ask user for age and citizenship (Y/N). Print if they are eligible to vote (age \geq 18 and citizenship = Y).

✓ Example Input:

Enter age: 20

Are you a citizen (Y/N)? Y

✓ Example Output:

You are eligible to vote

💡 Bonus Challenge

Write a program that checks if a given character is:

- Uppercase letter
- Lowercase letter
- Digit
- Special character

✓ Example Input:

Enter a character: \$

✓ Example Output:
It is a special character