

ASSIGNMENT 2:

Module 3: Control Structures in Python

Task 1: Check if a Number is Even or Odd

Problem Statement: Write a Python program that:

1. Takes an integer input from the user.
2. Checks whether the number is even or odd using an if-else statement.
3. Displays the result accordingly.

Code:

```
⌚ TuteDude Assignment 2.py > ...
1 # Task 1
2 number = int(input("Enter an integer: "))
3
4 # Check if the number is even or odd
5 if number % 2 == 0:
6     print(f"{number} is even.")
7 else:
8     print(f"{number} is odd.")
```

Output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\VG\Desktop\TuteDude Python> & C:/Users/VG/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/VG/Desktop/TuteDude Python/TuteDude Assignment 2.py"
"Enter an integer: 5
5 is odd.
PS C:\Users\VG\Desktop\TuteDude Python> & C:/Users/VG/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/VG/Desktop/TuteDude Python/TuteDude Assignment 2.py"
"Enter an integer: 2
2 is even.
PS C:\Users\VG\Desktop\TuteDude Python>
```

Task 2: Sum of Integers from 1 to 50 Using a Loop

Problem Statement: Write a Python program that:

1. Uses a **for loop** to iterate over numbers from **1 to 50**.
2. Calculates the **sum** of all integers in this range.
3. Displays the final sum.

Code:

```
11 total = 0
12 for i in range(1, 51):
13     total += i
14 print(f"The sum of integers from 1 to 50 is: {total}")
```

Output:

```
PS C:\Users\VG\Desktop\TuteDude Python> & C:/Users/VG/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/VG/Desktop/TuteDude Python/TuteDude Assignment 2.py"
The sum of integers from 1 to 50 is: 1275
PS C:\Users\VG\Desktop\TuteDude Python>
```