Python Programming

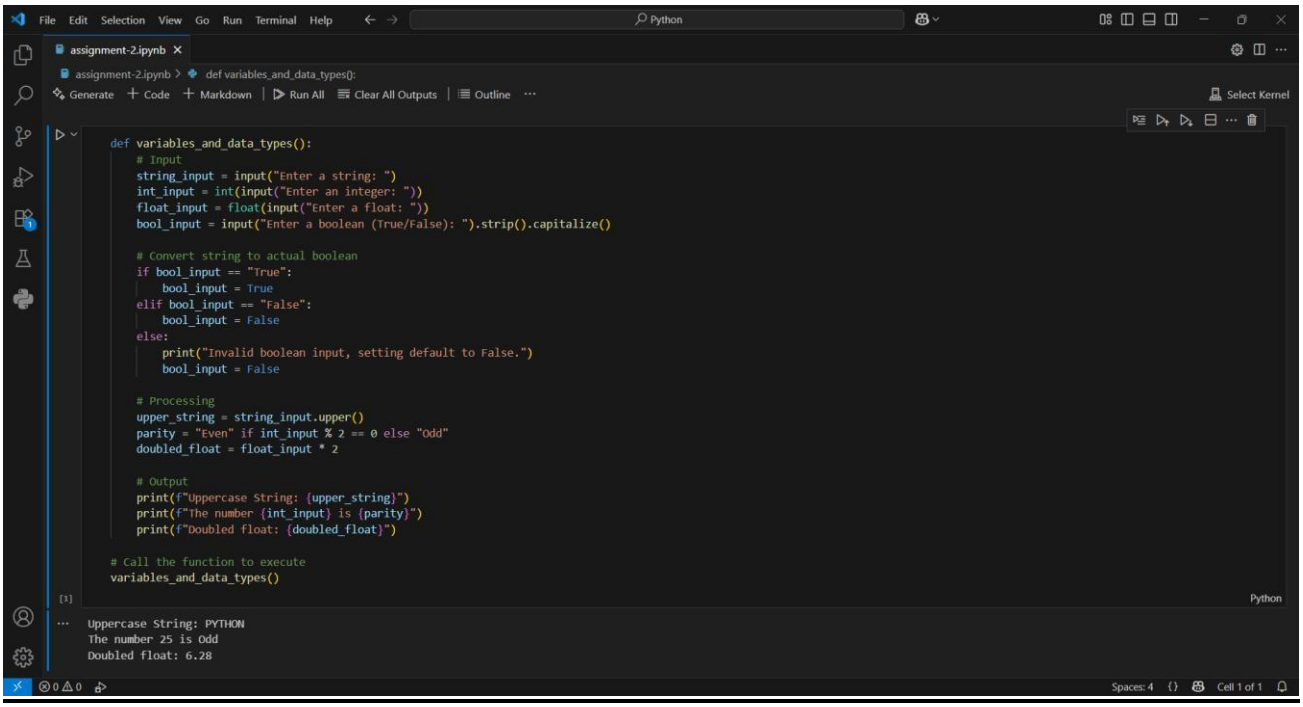
Assignment 02 Name: Muhammad Atiq Ur Rehman

Question No 01: Variables and Data Types Problem:

Write a Python program that:

1. Accepts a string, an integer, a float, and a boolean from the user.
2. Initializes variables for each type, and prints them out.
3. Convert the string to uppercase and print it.
4. Check if the integer is even or odd and print the result.
5. Multiply the float by 2 and print the result. **Answer:**

Code/Output:



Question No 02: Operators Problem:

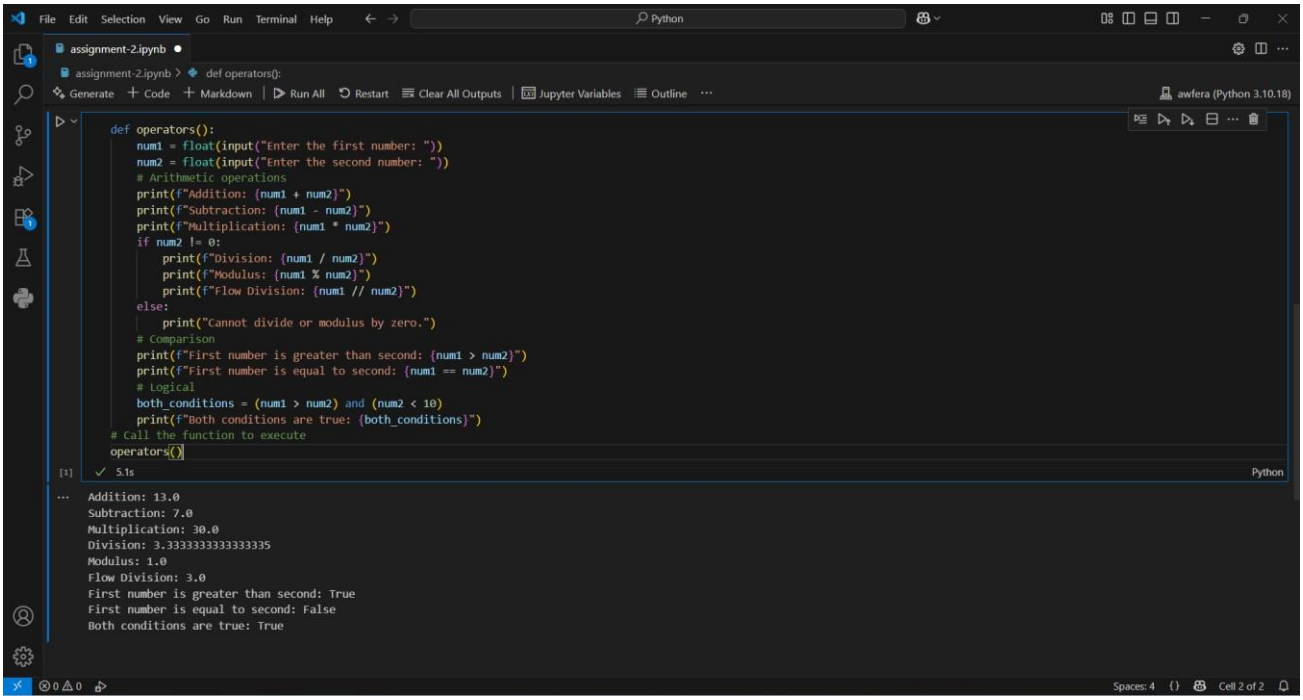
Write a Python program that:

1. Accepts two numbers as input from the user.
2. Performs and prints the result of all the arithmetic operations (addition, subtraction, multiplication, division, modulus, flow division) between these two numbers.

3. Use comparison operators to check if the first number is greater than the second, and if they are equal.
4. Use logical operators to combine two conditions (e.g., the first number is greater than the second, and the second number is less than 10).

Answer:

Code/Output:



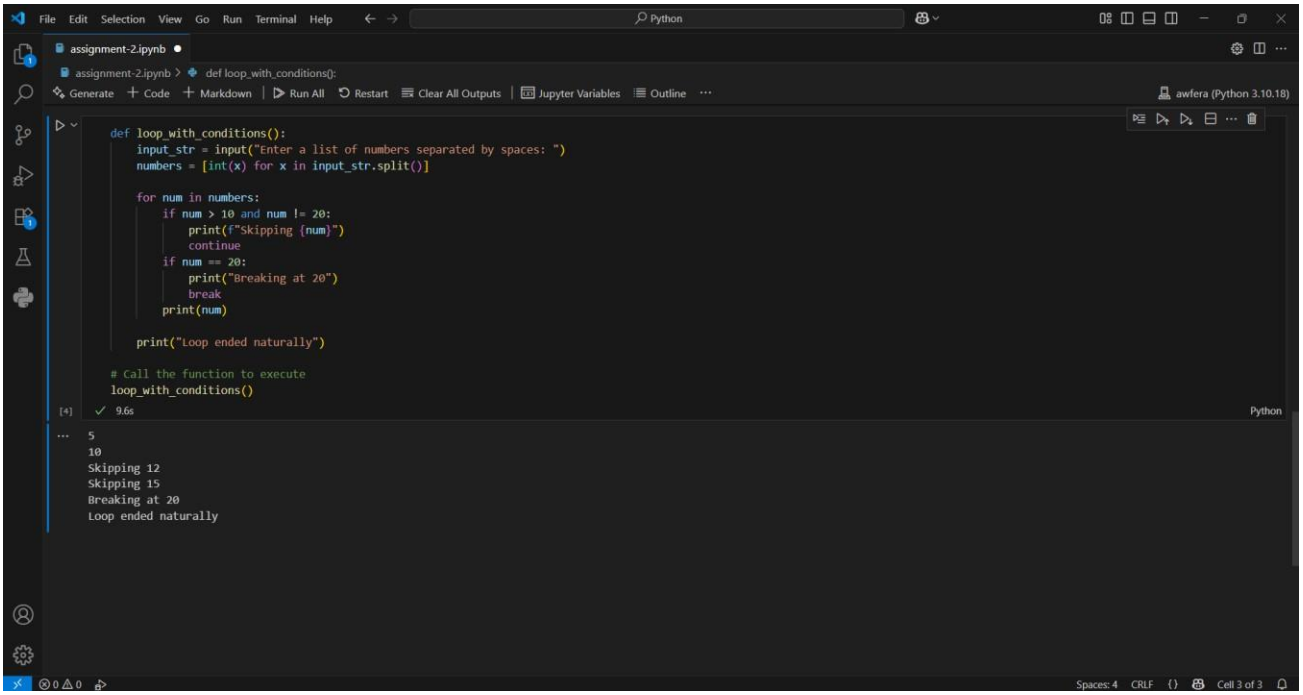
Question No 03: Loops Problem:

Write a Python program that:

1. Accepts a list of integers from the user.
2. Loops through the list and prints out each number.
3. If a number is greater than 10, skip it using the continue statement.
4. Stop the loop if the number is 20 using the break statement.
5. After the loop ends, print a message that the loop ended naturally.

Answer:

Code/Output:


File Edit Selection View Go Run Terminal Help
Python
assignment-2.ipynb
assignment-2.ipynb > def loop_with_conditions():
Generate + Code + Markdown | Run All Restart Clear All Outputs | Jupyter Variables Outline ...
awfera (Python 3.10.18)
def loop_with_conditions():
input_str = input("Enter a list of numbers separated by spaces: ")
numbers = [int(x) for x in input_str.split()]
for num in numbers:
if num > 10 and num != 20:
print(f"Skipping {num}")
continue
if num == 20:
print("Breaking at 20")
break
print(num)
print("Loop ended naturally")
# Call the function to execute
loop_with_conditions()
[4] 9.6s
Python
5
10
Skipping 12
Skipping 15
Breaking at 20
Loop ended naturally
Spaces: 4 CRLF {} Cell 3 of 3