

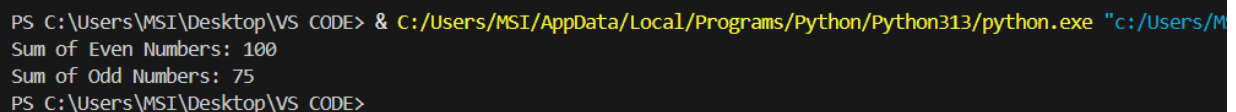
**1. Write a python program to find the sum of odd and even numbers from a set of numbers.**

**CODE:**

```
numbers = {10, 15, 20, 25, 30, 35, 40}
sum_even = sum(num for num in numbers if num % 2 == 0)
sum_odd = sum(num for num in numbers if num % 2 != 0)

print("Sum of Even Numbers:", sum_even)
print("Sum of Odd Numbers:", sum_odd)
```

**RESULT:**



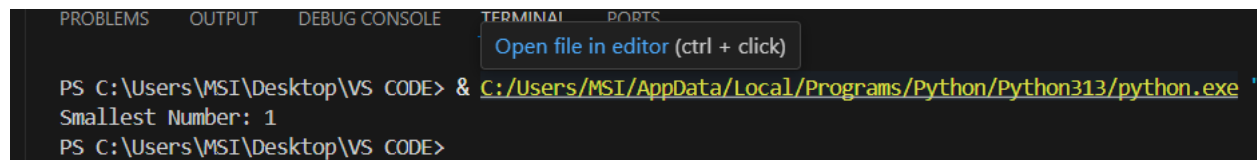
```
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/M...
Sum of Even Numbers: 100
Sum of Odd Numbers: 75
PS C:\Users\MSI\Desktop\VS CODE>
```

**2. Write a python program to find the smallest number from a set of numbers.**

**CODE:**

```
numbers = {10, 15, 3, 25, 7, 30, 1}
smallest_number = min(numbers)
print("Smallest Number:", smallest_number)
```

**RESULT:**



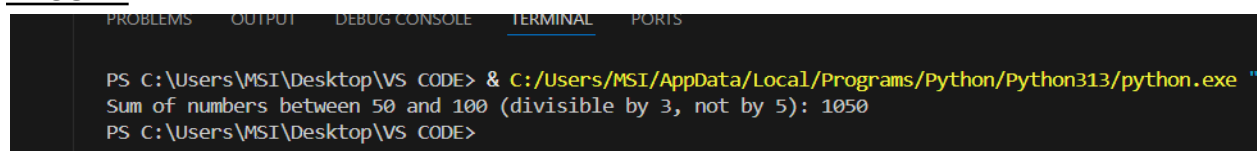
```
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe
Smallest Number: 1
PS C:\Users\MSI\Desktop\VS CODE>
```

**3. Write a python program to find the sum of all numbers between 50 and 100, which are divisible by 3 and not divisible by 5.**

**CODE:**

```
total_sum = sum(num for num in range(50, 101) if num % 3 == 0 and num
% 5 != 0)
print("Sum of numbers between 50 and 100 (divisible by 3, not by 5):",
total_sum)
```

**RESULT:**



```
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe
Sum of numbers between 50 and 100 (divisible by 3, not by 5): 1050
PS C:\Users\MSI\Desktop\VS CODE>
```

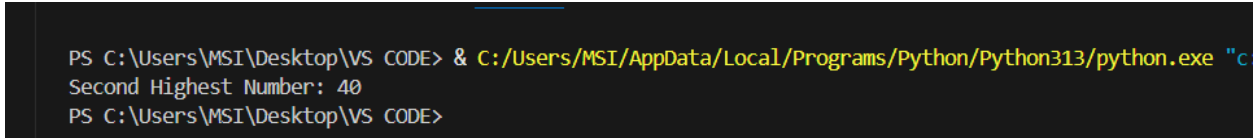
#### 4. Write a python program to find the second highest number from a set of numbers.

##### CODE:

```
numbers = {10, 25, 35, 50, 15, 40}
second_highest = sorted(numbers, reverse=True)[1]

print("Second Highest Number:", second_highest)
```

##### RESULT:



```
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/MSI/Desktop/VS CODE/4.py"
Second Highest Number: 40
PS C:\Users\MSI\Desktop\VS CODE>
```

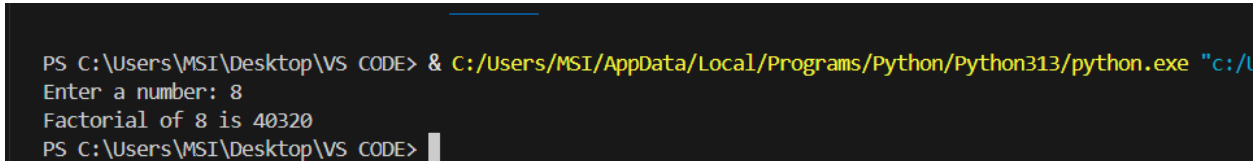
#### 5. Write a python program to find the factorial of a number using for loop.

##### CODE:

```
num = int(input("Enter a number: "))
factorial = 1
for i in range(1, num + 1):
    factorial *= i

print(f"Factorial of {num} is {factorial}")
```

##### RESULT:



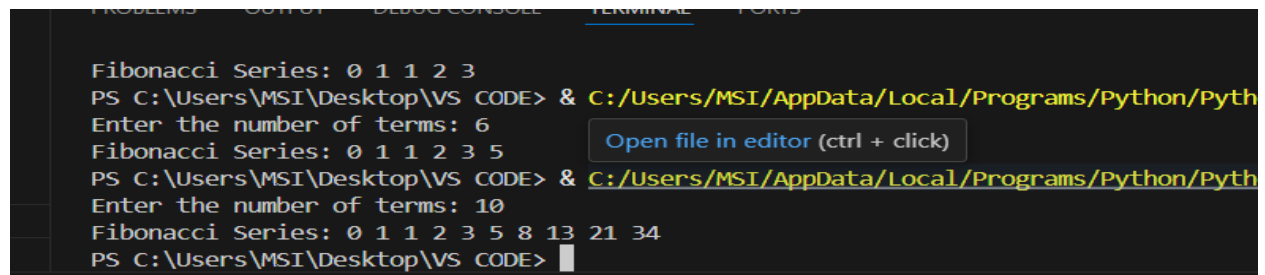
```
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/MSI/Desktop/VS CODE/5.py"
Enter a number: 8
Factorial of 8 is 40320
PS C:\Users\MSI\Desktop\VS CODE>
```

#### 6. Write a python program to generate Fibonacci series.

##### CODE:

```
n = int(input("Enter the number of terms: "))
a, b = 0, 1
print("Fibonacci Series:", end=" ")
for _ in range(n):
    print(a, end=" ")
    a, b = b, a + b
```

## **RESULT:**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Fibonacci Series: 0 1 1 2 3
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:\Users\MSI\Desktop\VS CODE\Fibonacci.py"
Enter the number of terms: 6
Fibonacci Series: 0 1 1 2 3 5
Open file in editor (ctrl + click)
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:\Users\MSI\Desktop\VS CODE\Fibonacci.py"
Enter the number of terms: 10
Fibonacci Series: 0 1 1 2 3 5 8 13 21 34
PS C:\Users\MSI\Desktop\VS CODE> █
```

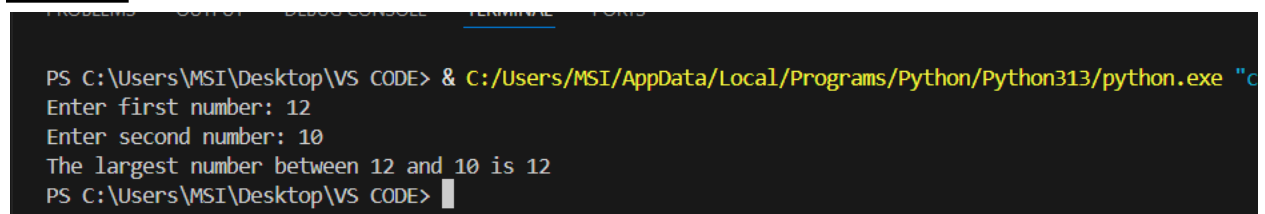
**7. Write a python program to find the largest number between two numbers using function.**

### **CODE:**

```
def find_largest(num1, num2):
    """Returns the largest number between num1 and num2."""
    return max(num1, num2)

a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
largest = find_largest(a, b)
print(f"The largest number between {a} and {b} is {largest}")
```

## **RESULT:**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:\Users\MSI\Desktop\VS CODE\largest.py"
Enter first number: 12
Enter second number: 10
The largest number between 12 and 10 is 12
PS C:\Users\MSI\Desktop\VS CODE> █
```

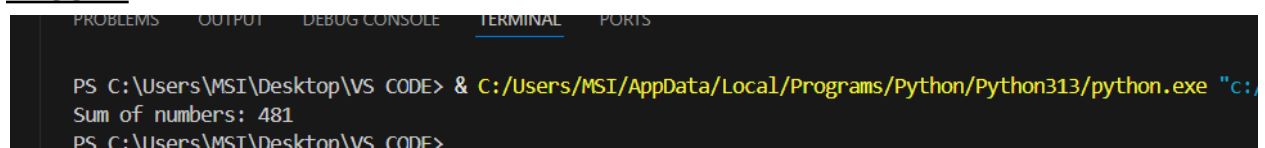
**8. Write a python program to find the sum of the numbers passed as Parameters.**

### **CODE:**

```
def sum_numbers(*nums):
    """Returns the sum of all numbers passed as arguments."""
    return sum(nums)

result = sum_numbers(10, 20, 30, 40, 50)
print("Sum of numbers:", result)
```

## **RESULT:**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\MSI\Desktop\VS CODE> & C:/Users/MSI/AppData/Local/Programs/Python/Python313/python.exe "c:\Users\MSI\Desktop\VS CODE\sum.py"
Sum of numbers: 481
PS C:\Users\MSI\Desktop\VS CODE> █
```

