

Assessment-01

Problem Statement:

To design and implement a program that performs basic arithmetic operations such as addition, subtraction, multiplication, and division. The program should handle user input, process the data accurately, and display the results efficiently.

Aim:

To write a program that takes two numbers as input and performs addition, subtraction, multiplication, and division using arithmetic operators.

Algorithm:

Step 1: Start

Step 2: Input Values for A and B

Step 3: Calculate $SUM = A + B$

Step 4: Calculate $SUB = A - B$

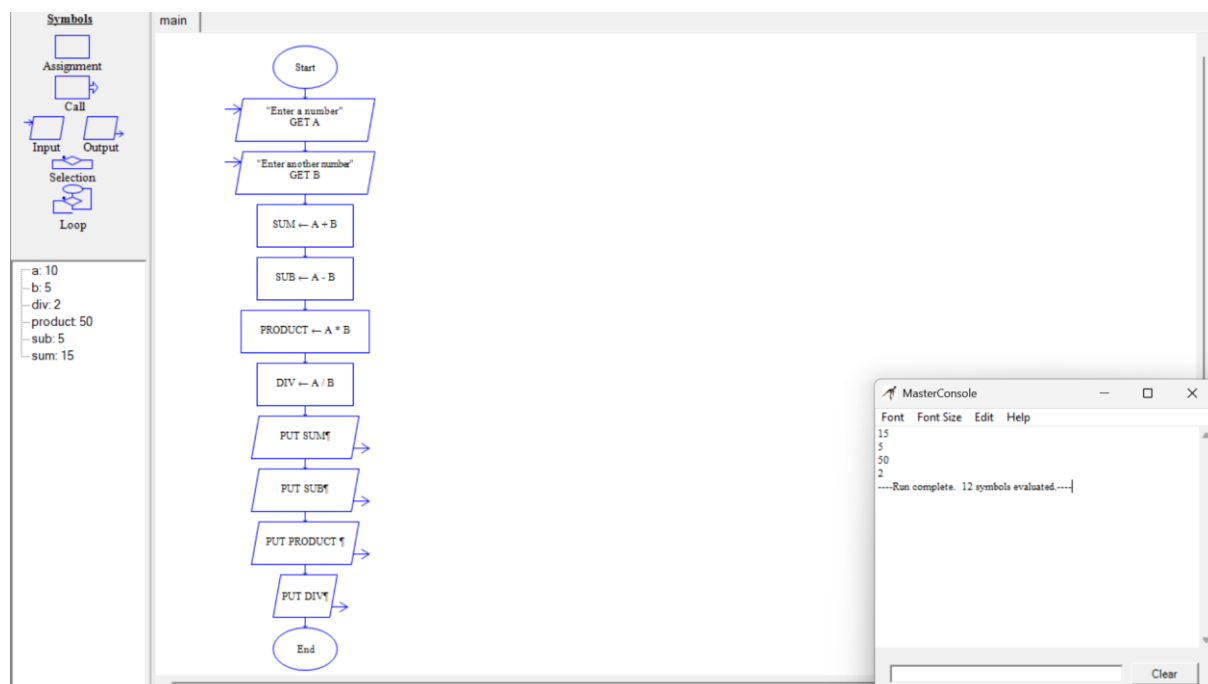
Step 5: Calculate $PRODUCT = A * B$

Step 6: Calculate $DIV = A / B$

Step 7: Display all results

Step 8: End

Flowchart:



Sample Program:

```
A = int(input("Enter first number: "))
```

```
B = int(input("Enter second number: "))
```

```
# Processing of operations:
```

```
addition = A + B
```

```
subtraction = A - B
```

```
multiplication = A * B
```

```
# Check division by zero:
```

```
if B != 0:
```

```
    division = A / B
```

```
else:
```

```
    division = "Undefined (division by zero not possible)"
```

```
# Output:
```

```
print("\nResults:")
```

```
print("Addition:", addition)
```

```
print("Subtraction:", subtraction)
```

```
print("Multiplication:", multiplication)
```

```
print("Division:", division)
```

Sample Input/Output:

```
= RESTART: C:/Users/ATHARV BISHT/Desktop/assignment.1.py
```

```
Enter first number: 10
```

```
Enter second number: 5
```

```
Results:
```

```
Addition: 15
```

```
Subtraction: 5
```

```
Multiplication: 50
```

```
Division: 2.0
```