Requirment-1

```python
num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))

sum_result = num1 + num2
difference_result = num1 - num2
product_result = num1 * num2
quotient_result = num1 / num2 if num2 != 0 else "Undefined (Division by Zero)"

print(f"Sum: {sum_result}")
print(f"Difference: {difference_result}")
print(f"Product: {product_result}")
print(f"Quotient: {quotient_result}")
```

Requirment-2

```python
app.py > ...
1    num1 = float(input("Enter the first number: "))
2    num2 = float(input("Enter the second number: "))
3
4    add = num1 + num2
5    subtract = num1 - num2
6    multiply = num1 * num2
7    divide = num1 / num2 if num2 != 0 else "Undefined (Division by Zero)"
8
9    print(f"Addition: {add}")
10   print(f"Subtraction: {subtract}")
11   print(f"Multiplication: {multiply}")
12   print(f"Division: {divide}")
13
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\fady\Desktop\New folder> & C:/Users/fady/AppData/Local/Microsoft/WindowsApps/python3.13.exe "c:/Users/fady/Desktop/New folder/app.py"
Enter the first number: 10
Enter the second number: 20
Addition: 30.0
Subtraction: -10.0
Multiplication: 200.0
Division: 0.5
PS C:\Users\fady\Desktop\New folder>
```

Requirment-3

```python
while True:
    try:
        num1 = float(input("Enter the first number: "))  # Try to convert input to float
        break
    except ValueError:
        print("Invalid input! Please enter a valid number.")

while True:
    try:
        num2 = float(input("Enter the second number: "))
        break
    except ValueError:
        print("Invalid input! Please enter a valid number.")

add = num1 + num2
subtract = num1 - num2
multiply = num1 * num2
divide = num1 / num2 if num2 != 0 else "Undefined (Division by Zero)"


print(f"Addition: {add}")
print(f"Subtraction: {subtract}")
print(f"Multiplication: {multiply}")
print(f"Division: {divide}")
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

Enter the second number: 20
Addition: 30.0
Subtraction: -10.0
Multiplication: 200.0
Division: 0.5
PS C:\Users\fady\Desktop\New folder> & C:/Users/fady/AppData/Local/Microsoft/WindowsApps/python3.13.exe "c:/Users/fady/Desktop/New folder/app.py"
Enter the first number: f
Invalid input! Please enter a valid number.
Enter the first number: 10
Enter the second number: 20
Addition: 30.0
Subtraction: -10.0
Multiplication: 200.0
Division: 0.5
PS C:\Users\fady\Desktop\New folder>
```