**while 1**:  
 print(**" 1. Addition**\n **2. Substration**\n **3. Multiplication**\n **4. Division"**)  
 choice=int(input(**"Enter your choice : "**))  
 x = int(input(**"No. 1:"**))  
 y = int(input(**"No. 2:"**))  
 **if** choice == **1**:  
 print(**"Answer is : "**,x+y)  
 **elif** choice == **2**:  
 print(**"Answer is : "**, x - y)  
 **elif** choice==**3**:  
 print(**"Answer is : "**, x \* y)  
 **elif** choice==**4**:  
 print(**"Answer is : "**, x / y)  
  
 *# elif choice == "XXX":  
 # break***else**:  
 print(**"Invalid Input"**)

output

1. Addition

2. Substration

3. Multiplication

4. Division

Enter your choice : 1

No. 1:22

No. 2:2

Answer is : 24

1. Addition

2. Substration

3. Multiplication

4. Division

Enter your choice :

def addition(x, y):

return x + y

def subtraction(x, y):

return x - y

def multiplication(x, y):

return x \* y

def division(x, y):

if y != 0:

return x / y

else:

return "Error! Division by zero."

print("Select operation:")

print("1. Addition")

print("2. Subtraction")

print("3. Multiplication")

print("4. Division")

choice = input("Enter your choice (1/2/3/4): ")

if choice in ['1', '2', '3', '4']:

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

if choice == '1':

print(f"The result is: {addition(num1, num2)}")

elif choice == '2':

print(f"The result is: {subtraction(num1, num2)}")

elif choice == '3':

print(f"The result is: {multiplication(num1, num2)}")

elif choice == '4':

print(f"The result is: {division(num1, num2)}")

else:

print("Invalid Input")

output:

Select operation:

1. Addition

2. Subtraction

3. Multiplication

4. Division

Enter your choice (1/2/3/4): 1

Enter first number: 2

Enter second number: 3

The result is: 5.0

While loop

def addition(x, y):

return x + y

def subtraction(x, y):

return x - y

def multiplication(x, y):

return x \* y

def division(x, y):

if y != 0:

return x / y

else:

return "Error! Division by zero not possible."

while True:

print("Select operation:")

print("1. Addition")

print("2. Subtraction")

print("3. Multiplication")

print("4. Division")

print("5. Exit")

choice = input("Enter your choice (1/2/3/4/5): ")

if choice in ['1', '2', '3', '4']:

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

if choice == '1':

print(f"The result is: {addition(num1, num2)}")

elif choice == '2':

print(f"The result is: {subtraction(num1, num2)}")

elif choice == '3':

print(f"The result is: {multiplication(num1, num2)}")

elif choice == '4':

print(f"The result is: {division(num1, num2)}")

elif choice == '5':

print("Exiting the program.")

break

else:

print("Invalid Input, please try again.")

output

Select operation:

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Exit

Enter your choice (1/2/3/4/5): 4

Enter first number: 23

Enter second number: 0

The result is: Error! Division by zero not possiblr.

Select operation:

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Exit

Enter your choice (1/2/3/4/5): 5

Exiting the program.