

```
print("\n--Welcome to Simple Calculator--")
```

```
history=[]
```

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

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

```
def addition_num():
```

```
    add=a+b
```

```
    print(f"The addition of enter num is:{add}")
```

```
    history.append(f"{a} + {b}={add}")
```

```
def subtraction_num():
```

```
    sub=a-b
```

```
    print(f"The subtraction of enter num is:{sub}")
```

```
    history.append(f"{a} - {b}={sub}")
```

```
def multiply_num():
```

```
    mul=a*b
```

```
    print(f"The multiplication of enter num is:{mul}")
```

```
    history.append(f"{a} * {b}={mul}")
```

```
def division_num():
```

```
    if b==0:
```

```
        print("Division by zero is not possible")
```

```
        history.append(f"{a} / {b}=Error(Division by zero)")
```

```
    else:
```

```
        div=a/b
```

```
        print(f"The division of enter num is:{div}")
```

```
        history.append(f"{a} / {b}={div}")
```

```
def modulus_num():
```

```
mod=a%b

print(f"The remainder of enter num is:{mod}")

history.append(f"{a} % {b}={mod}")
```

```
def menu():
```

```
    global a,b
```

```
    while True:
```

```
        print("\n---Calculator Menu ---")
```

```
        print("1. Addition")
```

```
        print("2. Subtraction")
```

```
        print("3. Multiplication")
```

```
        print("4. Division")
```

```
        print("5. Modulus")
```

```
        print("6 Change Numbers")
```

```
        print("7 Show History")
```

```
        print("8 Exit")
```

```
    choice = input("Choose an option: ")
```

```
    if choice == '1':
```

```
        addition_num()
```

```
    elif choice == '2':
```

```
        subtraction_num()
```

```
    elif choice == '3':
```

```
        multiply_num()
```

```
    elif choice == '4':
```

```
        division_num()
```

```
    elif choice == '5':
```

```
        modulus_num()
```

```
    elif choice == '6':
```

```
        try:
```

```
            a=int(input("Enter new value for a:"))
```

```
b=int(input("Enter new value for b:"))  
print(f"Updated numbers:a={a} and b={b}")
```

```
except ValueError:
```

```
    print("Invalid input.Please enter integers only")
```

```
elif choice=='7':
```

```
    if not history:
```

```
        print("No operations done yet!")
```

```
    else:
```

```
        print("Operation history:")
```

```
        for record in history:
```

```
            print(record)
```

```
elif choice =='8':
```

```
    print("Exiting Calculator.Thankyou for using it!")
```

```
    break
```

```
else:
```

```
    print("Invalid choice,Please enter a number between 1 and 6")
```

```
menu()
```

OUTPUT:

--Welcome to Simple Calculator--

Enter first number a:8

Enter first number b:4

---Calculator Menu ---

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Modulus

6 Change Numbers

7 Show History

8 Exit

Choose an option: 1

The addition of enter num is:12

---Calculator Menu ---

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Modulus

6 Change Numbers

7 Show History

8 Exit

Choose an option: 3

The multiplication of enter num is:32

---Calculator Menu ---

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Modulus

6 Change Numbers

7 Show History

8 Exit

Choose an option: 6

Enter new value for a:6

Enter new value for b:4

Updated numbers:a=6 and b=4

---Calculator Menu ---

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
- 6 Change Numbers
- 7 Show History
- 8 Exit

Choose an option: 7

Operation history:

$8 + 4 = 12$

$8 * 4 = 32$

---Calculator Menu ---

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
- 6 Change Numbers
- 7 Show History
- 8 Exit

Choose an option: 8

Exiting Calculator.Thankyou for using it!