

Python calculator Code:

```
import math
```

```
def add(x, y):
```

```
    return x + y
```

```
def subtract(x, y):
```

```
    return x - y
```

```
def multiply(x, y):
```

```
    return x * y
```

```
def divide(x, y):
```

```
    if y == 0:
```

```
        return "Error! Division by zero."
```

```
    else:
```

```
        return x / y
```

```
def exponentiate(x, y):
```

```
    return x ** y
```

```
def calculator():
```

```
    print("Welcome to Simple Calculator")
```

```
    print("Select operation:")
```

```
    print("1. Add")
```

```
    print("2. Subtract")
```

```
    print("3. Multiply")
```

```
    print("4. Divide")
```

```
    print("5. Exponentiate")
```

```
    print("6. Quit")
```

```
    while True:
```

```
choice = input("Enter choice (1/2/3/4/5/6): ")

if choice in ('1', '2', '3', '4', '5'):
    num1 = float(input("Enter first number: "))
    num2 = float(input("Enter second number: "))

    if choice == '1':
        print("Result:", add(num1, num2))
    elif choice == '2':
        print("Result:", subtract(num1, num2))
    elif choice == '3':
        print("Result:", multiply(num1, num2))
    elif choice == '4':
        print("Result:", divide(num1, num2))
    elif choice == '5':
        print("Result:", exponentiate(num1, num2))
elif choice == '6':
    print("Thank you for using Simple Calculator")
    break
else:
    print("Invalid Input")
```

```
calculator()
```