

Simple Python Calculator

This is a simple command-line calculator program written in Python. It can perform basic arithmetic operations: addition, subtraction, multiplication, and division.

1. How to Write the Code

The code has been saved for you in a file named `simple_calculator.py`. If you were to write it yourself, you would use a text editor (like VS Code, Notepad++, or Nano) and save the following content into a file with a `.py` extension:

Python

```
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."
    return x / y

print("Select operation.")
print("1. Add")
print("2. Subtract")
print("3. Multiply")
print("4. Divide")

while True:
    # Take input from the user
    choice = input("Enter choice(1/2/3/4): ")

    # Check if choice is one of the four options
    if choice in ('1', '2', '3', '4'):
        try:
            num1 = float(input("Enter first number: "))
            num2 = float(input("Enter second number: "))
        except ValueError:
            print("Invalid input. Please enter a number.")
            continue
```

```

if choice == '1':
    print(num1, "+", num2, "=", add(num1, num2))

elif choice == '2':
    print(num1, "-", num2, "=", subtract(num1, num2))

elif choice == '3':
    print(num1, "*", num2, "=", multiply(num1, num2))

elif choice == '4':
    result = divide(num1, num2)
    print(num1, "/", num2, "=", result)

# Check if user wants another calculation
next_calculation = input("Let's do next calculation? (yes/no): ")
if next_calculation.lower() == "no":
    break

else:
    print("Invalid Input")

```

2. How to Use and Run the Code

To run this program, you need to have **Python** installed on your computer.

1. **Open your terminal or command prompt.**
2. **Navigate to the directory** where you saved the `simple_calculator.py` file.
3. **Execute the script** using the Python interpreter command:
4. **Follow the on-screen prompts:**
 - The program will first ask you to select an operation by entering a number from 1 to 4.
 - Then, it will ask you to enter the first number and the second number.
 - It will display the result of the calculation.
 - Finally, it will ask if you want to perform another calculation. Enter `yes` or `no` .

Example Session:

Plain Text

Select operation.

1. Add
2. Subtract

3. Multiply

4. Divide

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

Enter first number: 10

Enter second number: 5

$10.0 + 5.0 = 15.0$

Let's do next calculation? (yes/no): yes

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

Enter first number: 20

Enter second number: 4

$20.0 / 4.0 = 5.0$

Let's do next calculation? (yes/no): no