BURUGU AJITH

MINI PROJECT

DESCRIPTION:

Develop a desktop application - Basic arithmetic calculator which performs addition, subtraction, multiplication, division and mod operation using GUI.

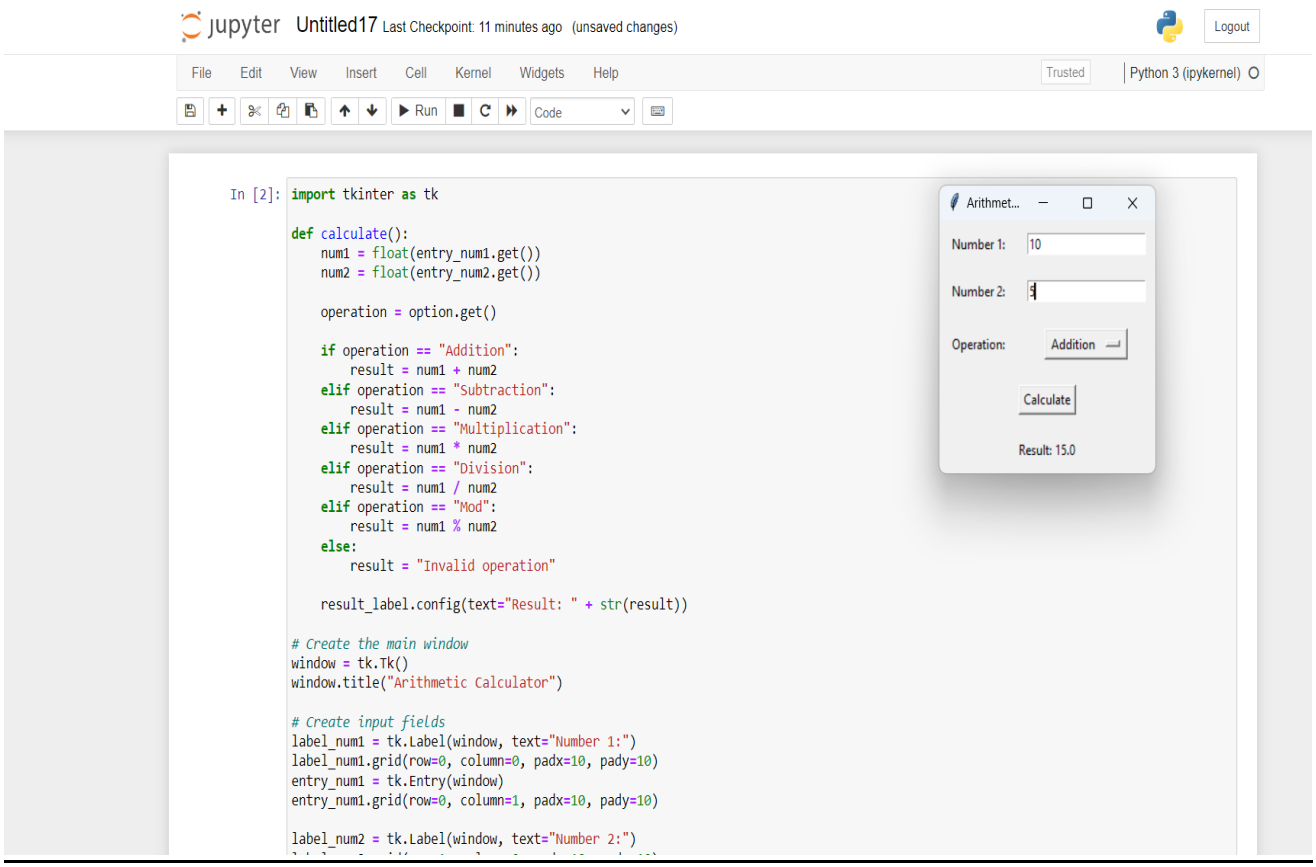
CODE:

```
import tkinter as tk


def calculate():
    num1 = float(entry_num1.get())
    num2 = float(entry_num2.get())

    operation = option.get()

    if operation == "Addition":
        result = num1 + num2
    elif operation == "Subtraction":
        result = num1 - num2
    elif operation == "Multiplication":
        result = num1 * num2
    elif operation == "Division":
        result = num1 / num2
    elif operation == "Mod":
        result = num1 % num2
    else:
        result = "Invalid operation"
```

```
    result_label.config(text="Result: " + str(result))

# Create the main window
window = tk.Tk()
window.title("Arithmetic Calculator")

# Create input fields
label_num1 = tk.Label(window, text="Number 1:")
label_num1.grid(row=0, column=0, padx=10, pady=10)
entry_num1 = tk.Entry(window)
entry_num1.grid(row=0, column=1, padx=10, pady=10)

label_num2 = tk.Label(window, text="Number 2:")
label_num2.grid(row=1, column=0, padx=10, pady=10)
entry_num2 = tk.Entry(window)
entry_num2.grid(row=1, column=1, padx=10, pady=10)

# Create operation dropdown
label_operation = tk.Label(window, text="Operation:")
label_operation.grid(row=2, column=0, padx=10, pady=10)
option = tk.StringVar(window)
option.set("Addition")
operation_dropdown = tk.OptionMenu(window, option, "Addition",
"Subtraction", "Multiplication", "Division", "Mod")
operation_dropdown.grid(row=2, column=1, padx=10, pady=10)
```

```
# Create calculate button
calculate_button = tk.Button(window, text="Calculate", command=calculate)
calculate_button.grid(row=3, column=0, columnspan=2, padx=10, pady=10)

# Create result label
result_label = tk.Label(window, text="Result: ")
result_label.grid(row=4, column=0, columnspan=2, padx=10, pady=10)

# Start the main event loop
window.mainloop()
```

OUTPUT:



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Trusted | Python 3 (ipykernel)

Run Code

```
    result_label.config(text="Result: " + str(result))

# Create the main window
window = tk.Tk()
window.title("Arithmetic Calculator")

# Create input fields
label_num1 = tk.Label(window, text="Number 1:")
label_num1.grid(row=0, column=0, padx=10, pady=10)
entry_num1 = tk.Entry(window)
entry_num1.grid(row=0, column=1, padx=10, pady=10)

label_num2 = tk.Label(window, text="Number 2:")
label_num2.grid(row=1, column=0, padx=10, pady=10)
entry_num2 = tk.Entry(window)
entry_num2.grid(row=1, column=1, padx=10, pady=10)

# Create operation dropdown
label_operation = tk.Label(window, text="Operation:")
label_operation.grid(row=2, column=0, padx=10, pady=10)
option = tk.StringVar(window)
option.set("Addition")
operation_dropdown = tk.OptionMenu(window, option, "Addition", "Subtraction", "Multiplication", "Division", "Mod")
operation_dropdown.grid(row=2, column=1, padx=10, pady=10)

# Create calculate button
calculate_button = tk.Button(window, text="Calculate", command=calculate)
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window.mainloop()
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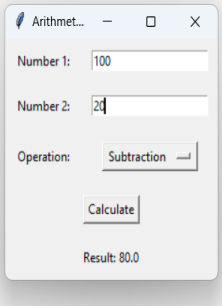

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Trusted | Python 3 (ipykernel)

Run Code

```
# Create the main window
window = tk.Tk()
window.title("Arithmetic Calculator")

# Create input fields
label_num1 = tk.Label(window, text="Number 1:")
label_num1.grid(row=0, column=0, padx=10, pady=10)
entry_num1 = tk.Entry(window)
entry_num1.grid(row=0, column=1, padx=10, pady=10)

label_num2 = tk.Label(window, text="Number 2:")
label_num2.grid(row=1, column=0, padx=10, pady=10)
entry_num2 = tk.Entry(window)
entry_num2.grid(row=1, column=1, padx=10, pady=10)

# Create operation dropdown
label_operation = tk.Label(window, text="Operation:")
label_operation.grid(row=2, column=0, padx=10, pady=10)
option = tk.StringVar(window)
option.set("Addition")
operation_dropdown = tk.OptionMenu(window, option, "Addition", "Subtraction", "Multiplication", "Division", "Mod")
operation_dropdown.grid(row=2, column=1, padx=10, pady=10)

# Create calculate button
calculate_button = tk.Button(window, text="Calculate", command=calculate)
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result_label.grid(row=4, column=0, columnspan=2, padx=10, pady=10)

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window.mainloop()
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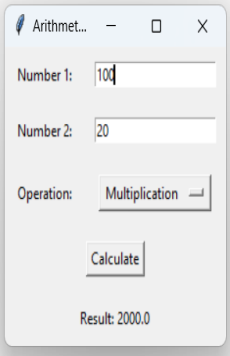

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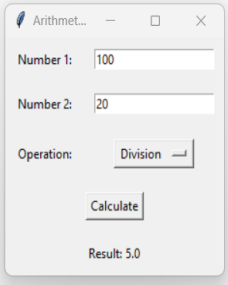
Trusted Python 3 (ipykernel)

Run Code

In [*]:

```
import tkinter as tk

def calculate():
    num1 = float(entry_num1.get())
    num2 = float(entry_num2.get())

    operation = option.get()

    if operation == "Addition":
        result = num1 + num2
    elif operation == "Subtraction":
        result = num1 - num2
    elif operation == "Multiplication":
        result = num1 * num2
    elif operation == "Division":
        result = num1 / num2
    elif operation == "Mod":
        result = num1 % num2
    else:
        result = "Invalid operation"

    result_label.config(text="Result: " + str(result))

# Create the main window
window = tk.Tk()
window.title("Arithmetic Calculator")

# Create input fields
label_num1 = tk.Label(window, text="Number 1:")
label_num1.grid(row=0, column=0, padx=10, pady=10)
entry_num1 = tk.Entry(window)
entry_num1.grid(row=0, column=1, padx=10, pady=10)

label_num2 = tk.Label(window, text="Number 2:")
```



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Logout

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Trusted Python 3 (ipykernel)

Run Code

In [*]:

```
import tkinter as tk

def calculate():
    num1 = float(entry_num1.get())
    num2 = float(entry_num2.get())

    operation = option.get()

    if operation == "Addition":
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entry_num1.grid(row=0, column=1, padx=10, pady=10)
```

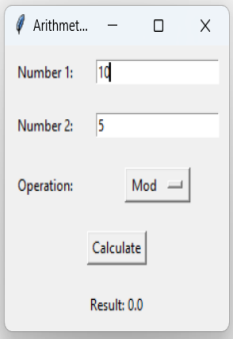

Conclusion:

The program is a basic calculator that you can use on your computer. It has buttons and fields where you can enter numbers, select an operation like addition or subtraction, and then calculate the result.