Date: 16/12/2025

To-Do:

- Python Basics
- Decision making- menu driven program

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Python Basics :

Features of Python =>

- **Interpreted** → runs line by line
- **Dynamically typed** → no need to declare data types
- **Object-Oriented**
- **Portable** → works on Windows, Linux, Mac
- **Open source**

Data Types =>

- int - 10, 5
- float - 3.14, 54.2
- Str - “mahek”
- Bool - true/false
- List - [1,2,3] ordered, mutable
- Tuple - (0,9,8) ordered, immutable
- Set - {5,6,7} unordered, unique values
- Dict - {“number” : “4”} key- value pairs

To check the type :

```
X = 10

print(type(x))
```

Input & Output =>

```
name = input("Enter your name: ")   #input is the keyword for taking user input

print("Hello", name)
```

For multiple inputs at once use => .split()

Operators =>

1. **Arithmetic operators**

   + - * / %

2. **Comparison operators**

   == != > < >= <=

3. **Logical operators**

   and or not

Type Conversion =>

int("10") # basically yaha pe 10 was a str then converted for int

float(5)

str(100)

Indentation =>

Mandatory cause here there are no brackets

It defines code block

Usually 4 spaces

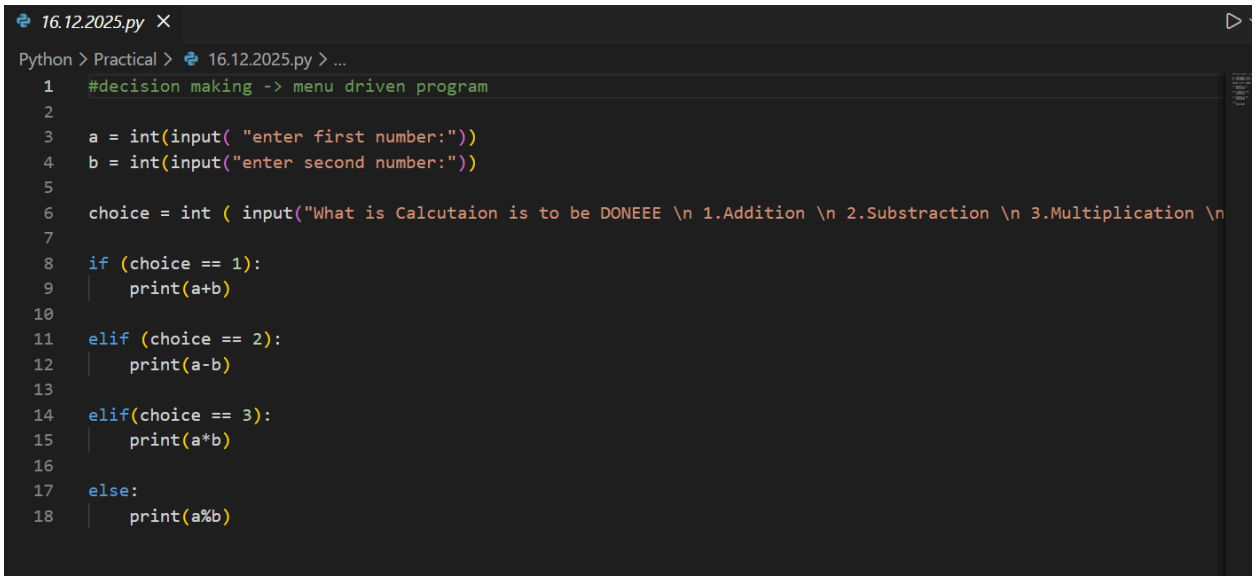
Decision Making :

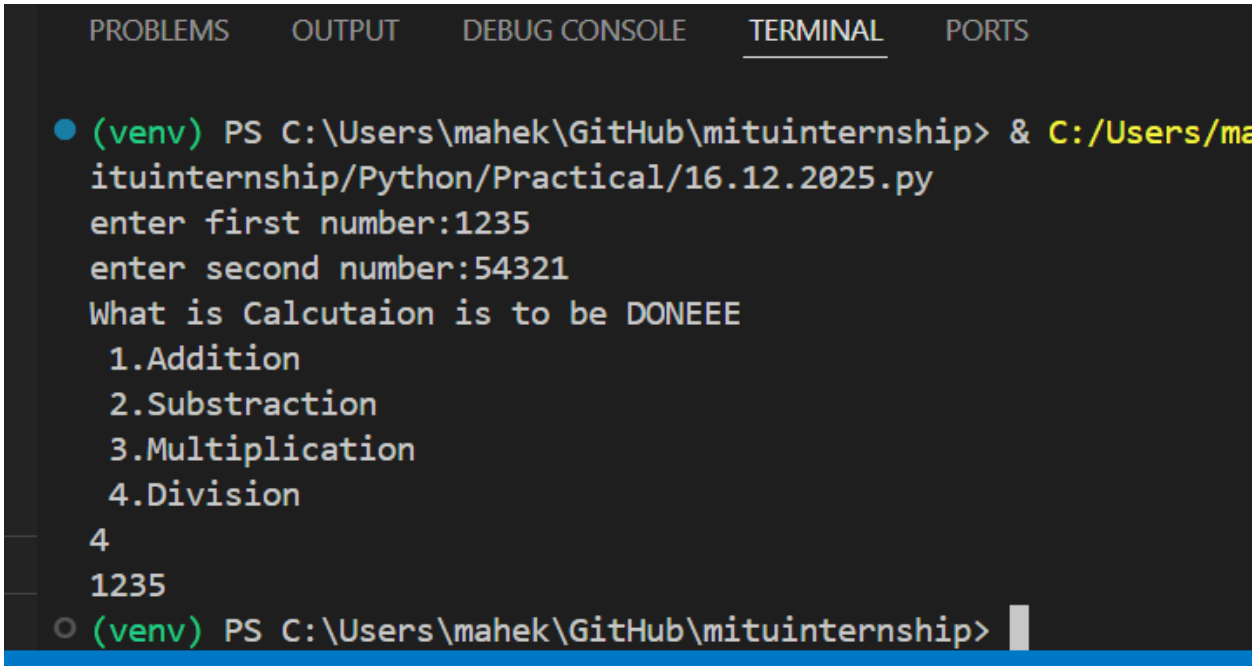
Decision making allows a program to choose different paths

Based on **conditions**

Conditional Statements =>

1. **If**
   Executes the block if the conditions is true
2. **Elif**
   Executes the else block if the if condition is false, basically any one block is executed
3. **Else**
   Executes the if all the above blocks conditions fail




PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
(venv) PS C:\Users\mahek\GitHub\mituinternship> & C:/Users/ma
ituinternship/Python/Practical/16.12.2025.py
enter first number:1235
enter second number:54321
What is Calcutaion is to be DONEEE
1.Addition
2.Substraction
3.Multiplication
4.Division
4
1235
(venv) PS C:\Users\mahek\GitHub\mituinternship>