Internship Report - Week 1

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Task 1: Python Environment Setup

Task Objective:
Set up the Python development environment by installing Python, an IDE (VS Code), extensions, and verifying package manager (pip).

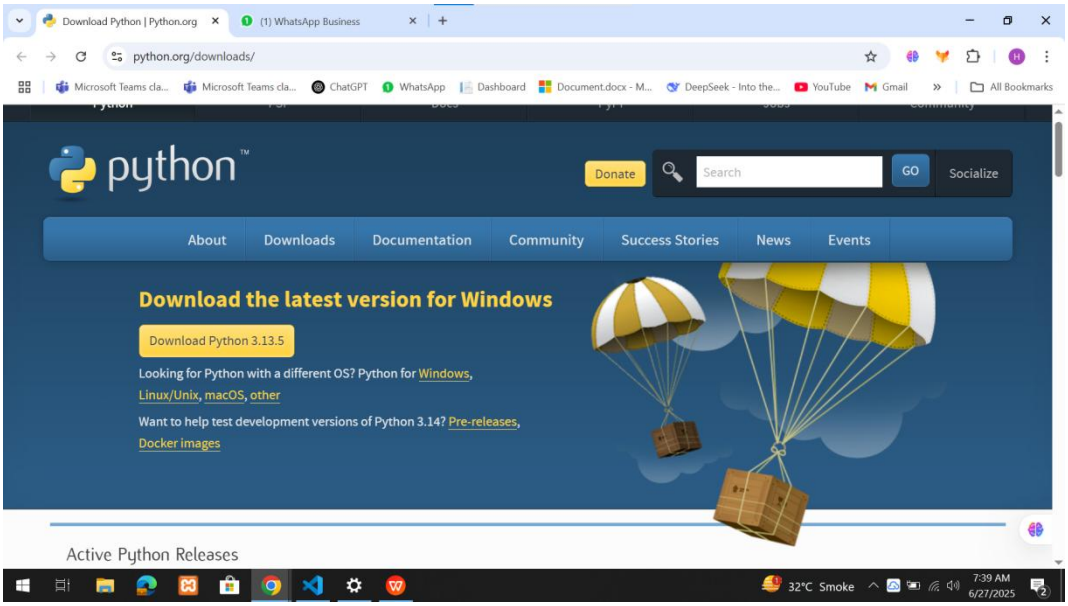
1. What I Did (Step-by-Step):

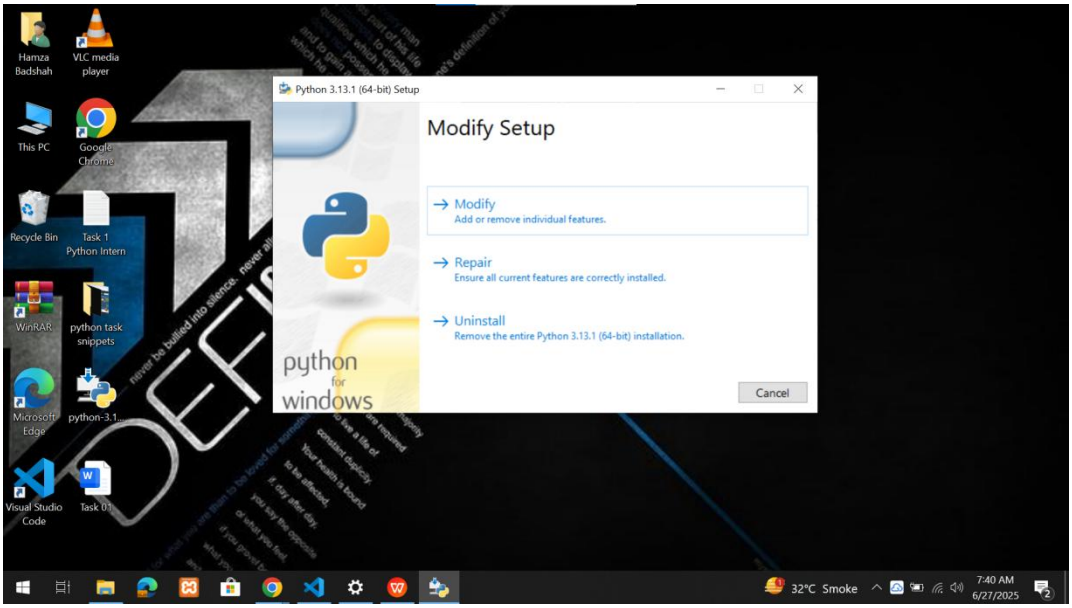
- Installed Python 3.13 from the official python.org site.
- Added Python to the system PATH during installation.
- Installed Visual Studio Code (VS Code) as my preferred IDE.
- Installed essential extensions in VS Code:
- Verified that pip was working by running pip --version.
- Attempted to install common packages using pip install numpy, pandas, matplotlib.
- Encountered a timeout error but learned how to troubleshoot it.

2. Screenshots:

1. Python installation

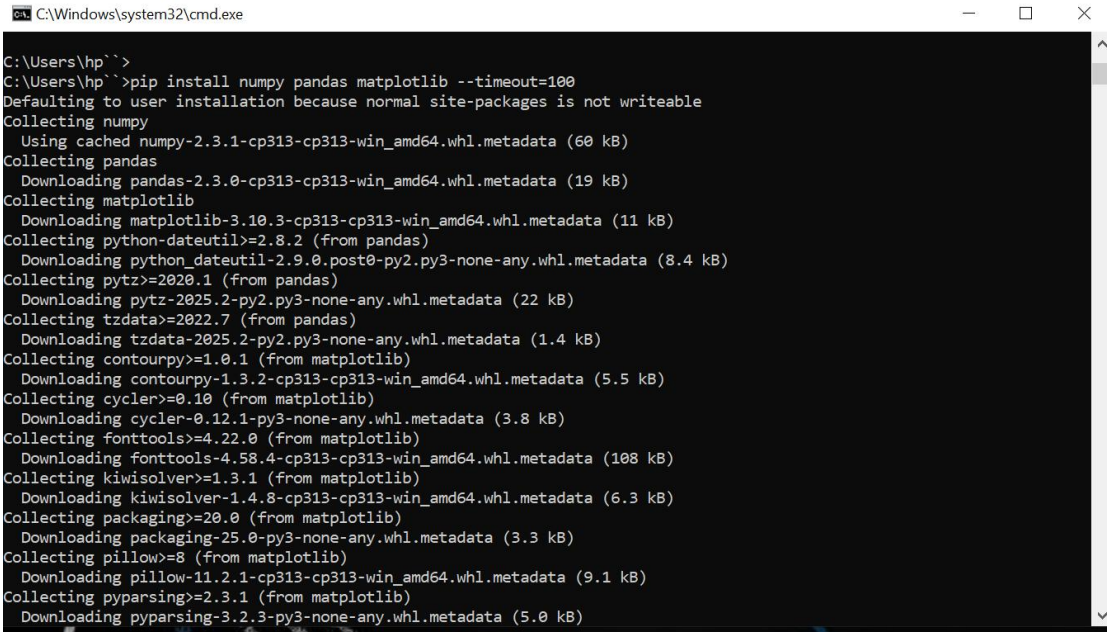
Python download and install setup was done the setup earlier.





2. Pip version Installation

I write the command for the pip installation in the **cmd** and install the python pakage, Including numpy, pandas, matplotlib.



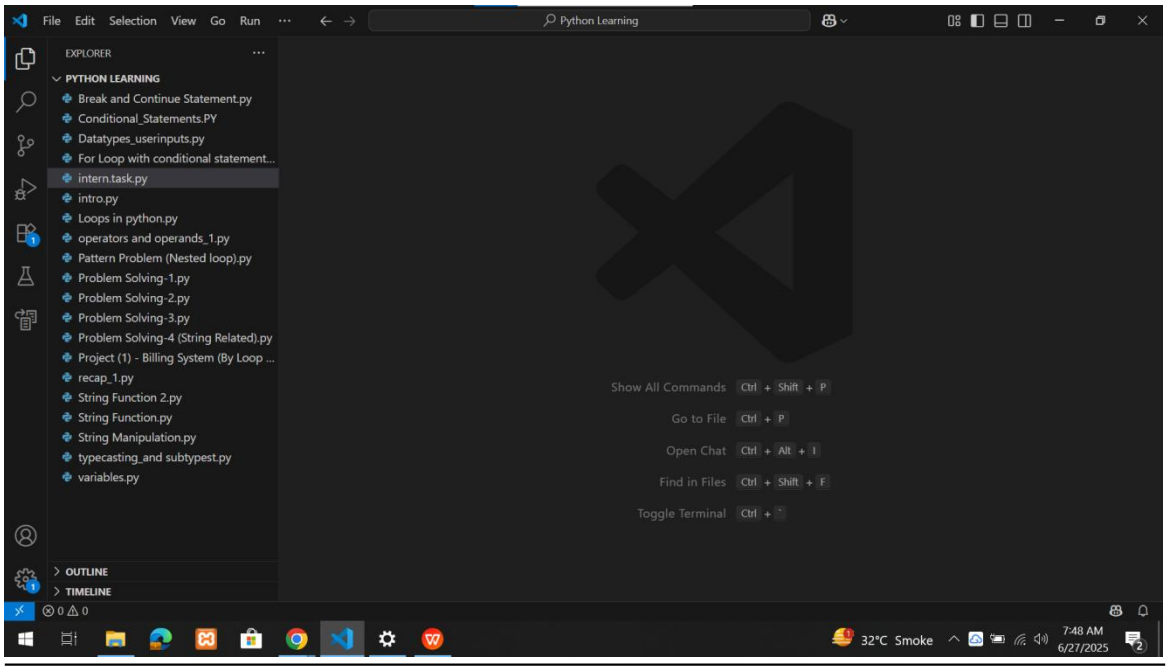
3. Pip list

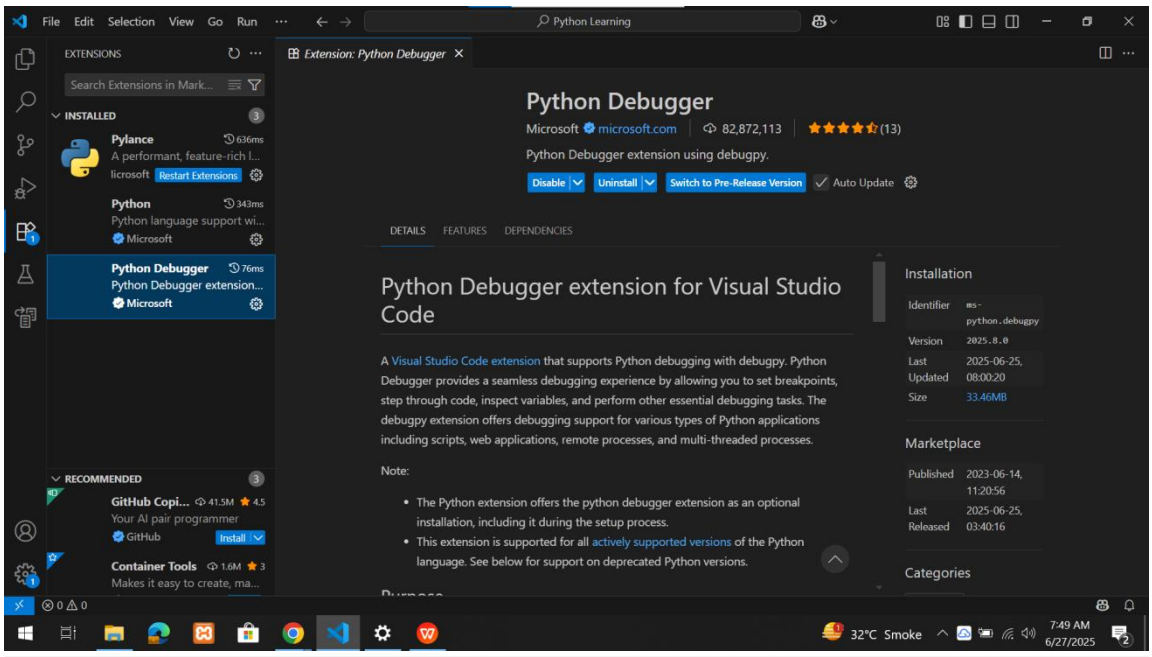
1. Press **Ctrl+R** and type **cmd** in the dialogue box.
2. Write a pip list and press enter.

```
C:\Users\hp``>
C:\Users\hp``>pip list
Package         Version
--------------- -----------
contourpy       1.3.2
cycler          0.12.1
fonttools       4.58.4
kiwisolver      1.4.8
matplotlib      3.10.3
numpy           2.3.1
packaging       25.0
pandas          2.3.0
pillow          11.2.1
pip             24.3.1
pyparsing       3.2.3
python-dateutil 2.9.0.post0
pytz            2025.2
six             1.17.0
tzdata          2025.2

C:\Users\hp``>
```

4. VS Code/Python Extension Setup

Go to search bar and type a python extension and install it.





Learnings and Challenges:

1. Understood the components of a development environment.
2. Faced network timeout during pip install.
3. Learned about timeout flags and mirror URLs.

Task 2: Print Personal Info with Python

Task Objective:
Write a Python script that prints name, hobby, age, and reason for learning Python.

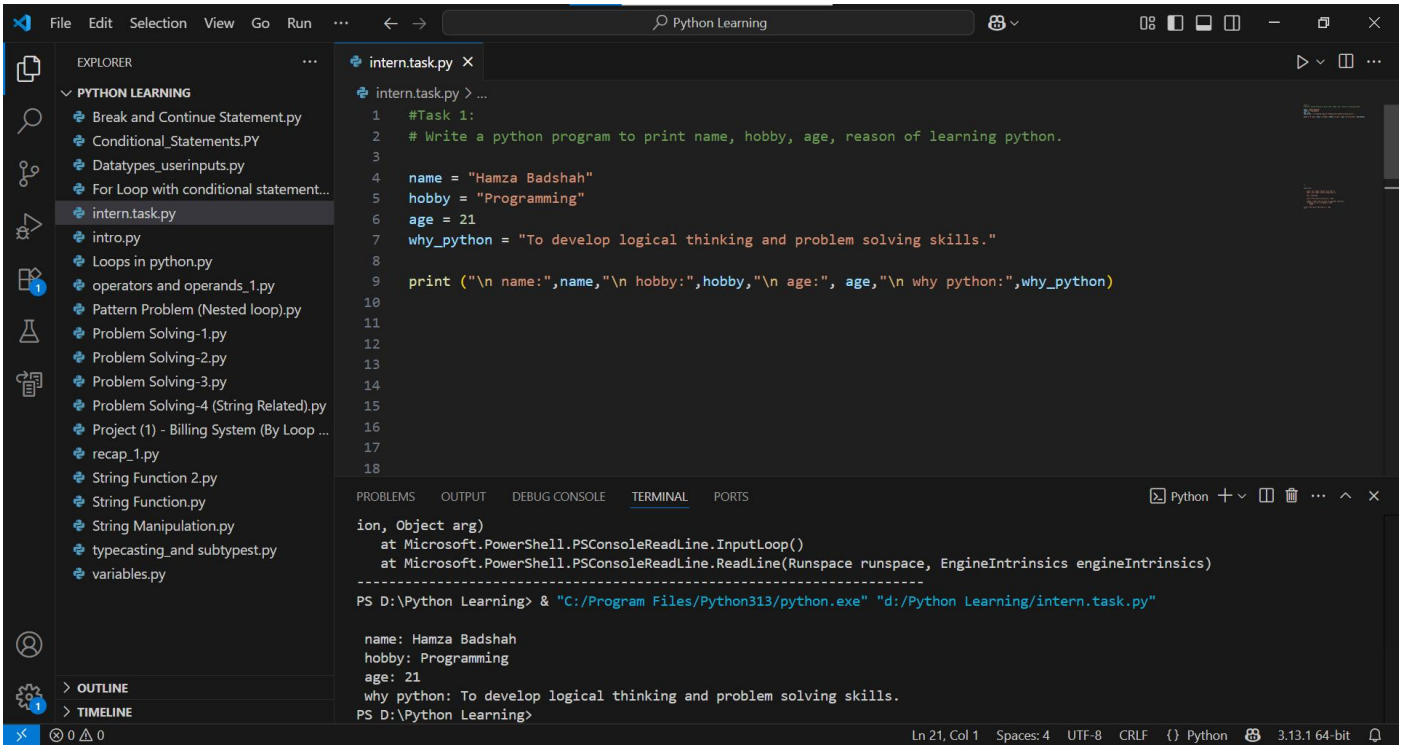
1. What I Did:

- Created a script using both variables and formatted output.
- Verified the output in VS Code terminal.

2. Code Snippet with Output

```
name = "Hamza Badshah"

hobby = "Programming"

age = 21
```

```
why_python = "To develop logical thinking and problem solving skills"

print ("\n name:",name,"\n hobby:",hobby,"\n age:", age,"\n goal:",why_python)
```



3. Learnings and Challenges:

- Practiced use of variables, strings, and print statements.
- No such a challenge I have faced as I am familiar with basic python execution.

Task 3: Addition of Two Numbers

Task Objective:

Write a Python script that takes two numbers as input and prints their sum.

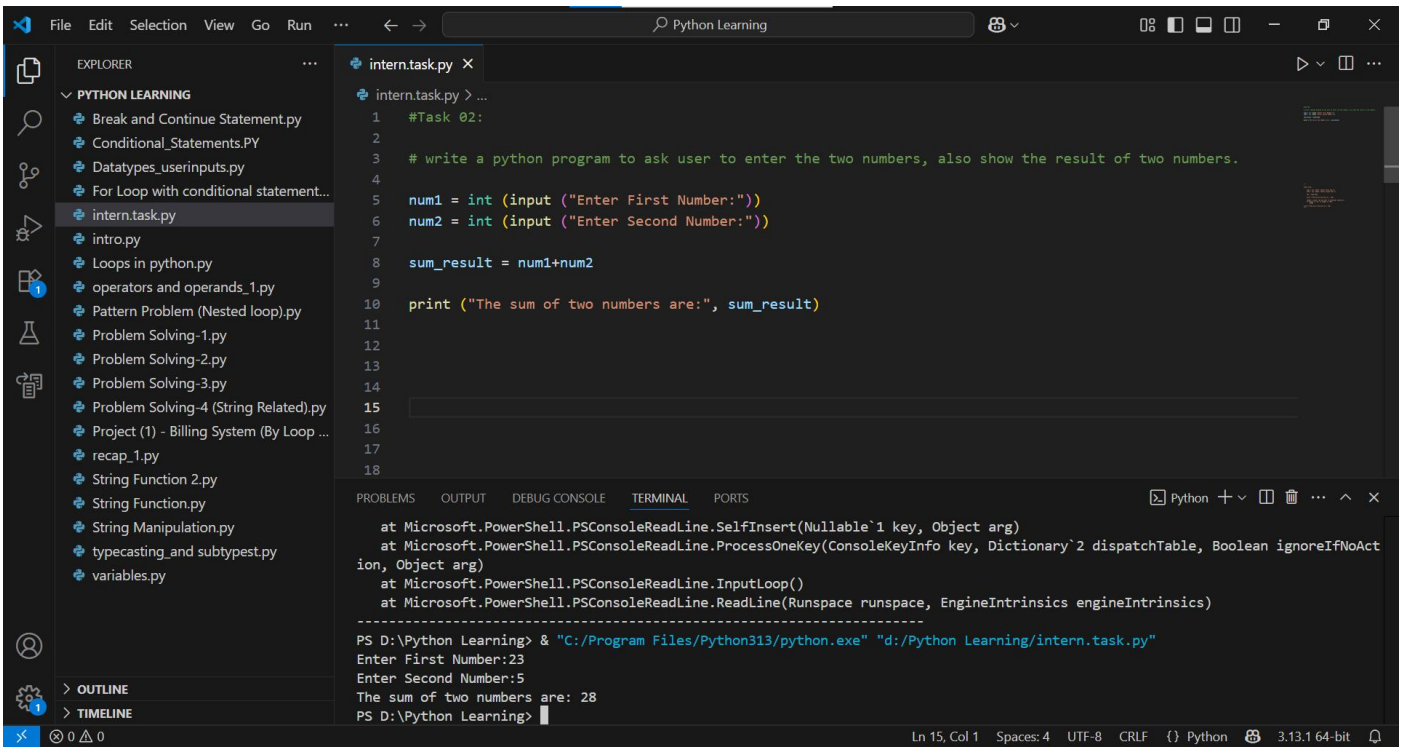
1. What I Did:

- Used input() to get values from user.
- Converted them to integers.
- Printed their sum.

2. Code Snippet with output:

Terminal asking for input and displaying the sum.

```
#Task 02:

# write a python program to ask user to enter the two numbers, also show the result of two numbers.

num1 = int (input ("Enter First Number:"))

num2 = int (input ("Enter Second Number:"))

sum_result = num1+num2

print ("The sum of two numbers are:", sum_result)
```



3. Learnings and Challenges:

- Learned to accept user input and perform basic arithmetic.
- Practiced type conversion from string to int.