QSkill Internship – Python Development
Assignment Submission

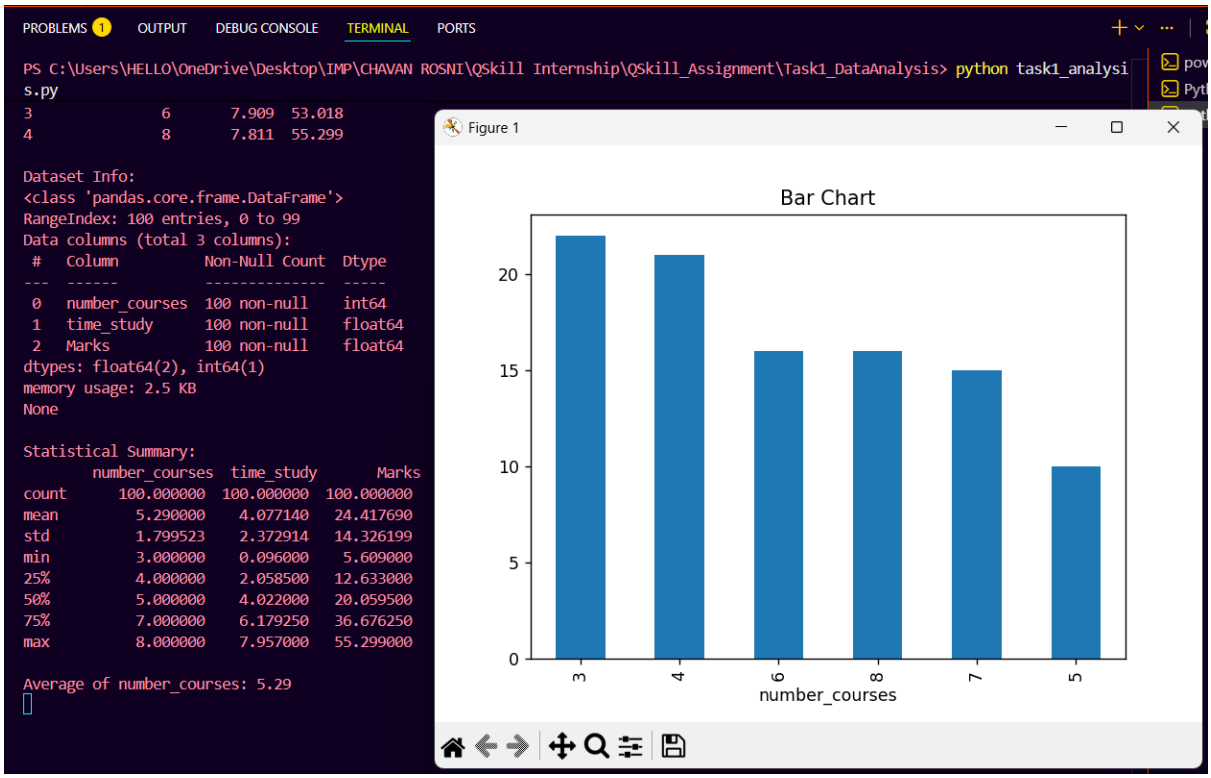
Name: Rosni Chavan
Domain: Python Development
Duration: 10 Jan 2026 – 10 Feb 2026

Tools & Technologies Used

- Python 3.x
- Pandas
- NumPy
- Matplotlib
- Seaborn
- Scikit-learn

Task 1: Data Analysis using Pandas & Matplotlib

- Loaded CSV dataset
- Performed data exploration
- Calculated average
- Created bar chart, scatter plot, and heatmap
- Gained insights from visualizations

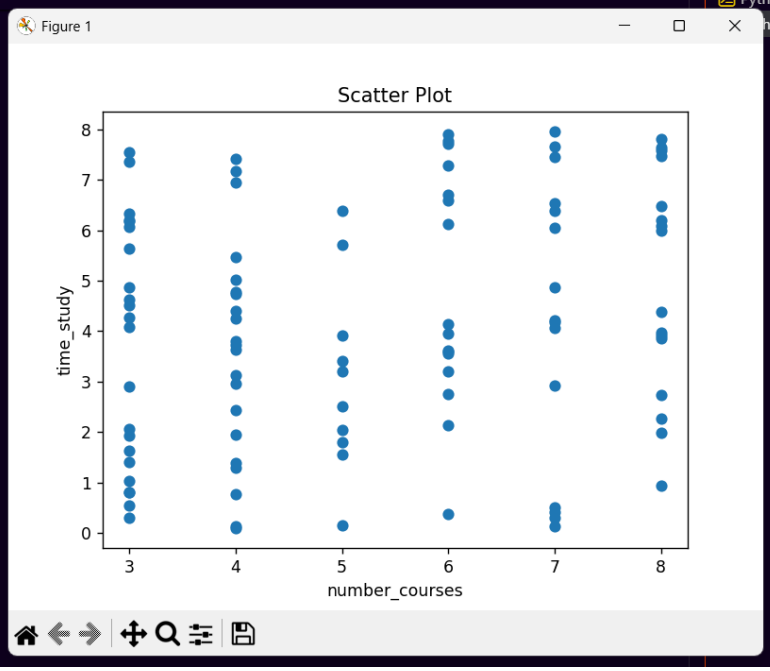


```
PS C:\Users\HELLO\OneDrive\Desktop\IMP\CHAVAN ROSNI\QSkill Internship\QSkill_Assignment\Task1_DataAnalysis> python task1_analysis.py
3              6       7.909  53.018
4              8       7.811  55.299

Dataset Info:
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 100 entries, 0 to 99
Data columns (total 3 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   number_courses  100 non-null    int64
 1   time_study      100 non-null    float64
 2   Marks           100 non-null    float64
dtypes: float64(2), int64(1)
memory usage: 2.5 KB
None

Statistical Summary:
       number_courses  time_study       Marks
count      100.000000  100.000000  100.000000
mean         5.290000    4.077140   24.417690
std          1.799523    2.372914   14.326199
min          3.000000    0.096000    5.609000
25%          4.000000    2.058500   12.633000
50%          5.000000    4.022000   20.059500
75%          7.000000    6.179250   36.676250
max          8.000000    7.957000   55.299000

Average of number_courses: 5.29
```




```
PROBLEMS 1  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

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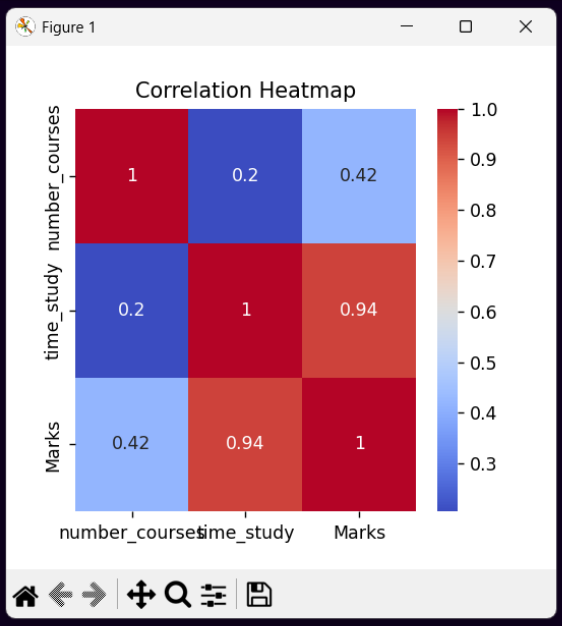
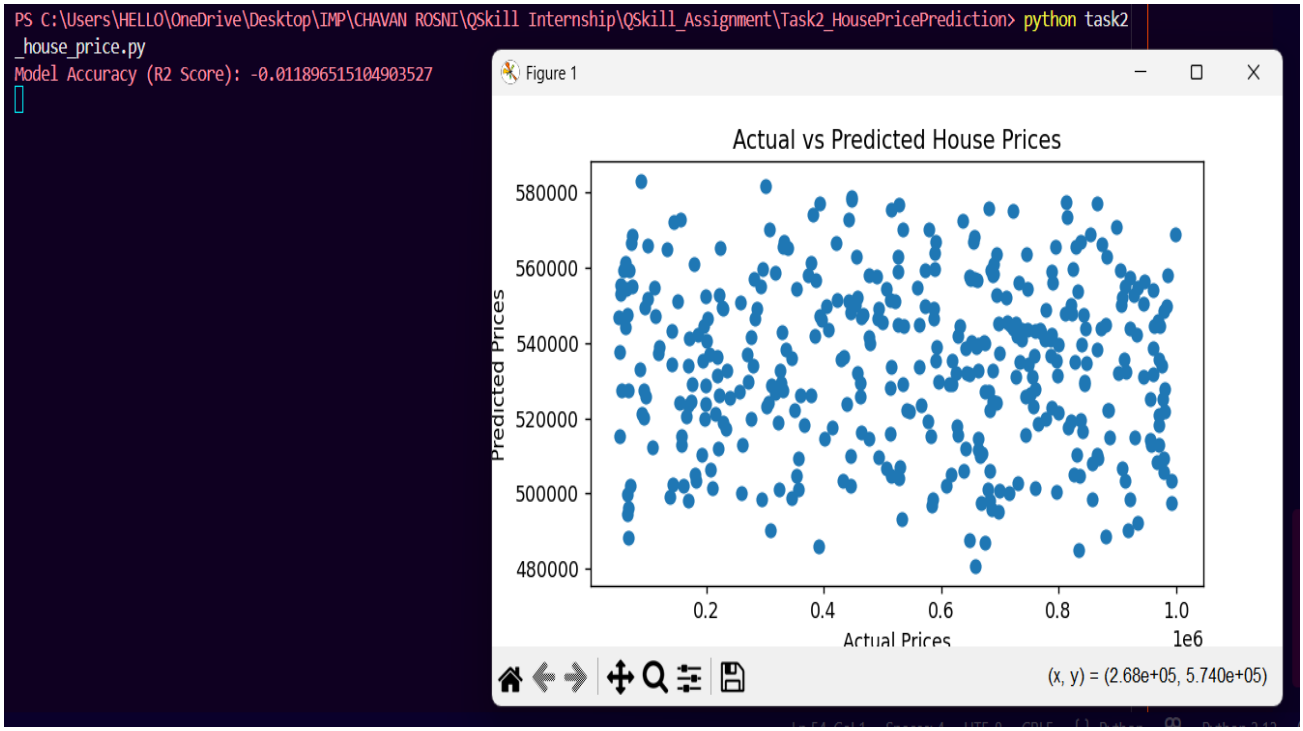


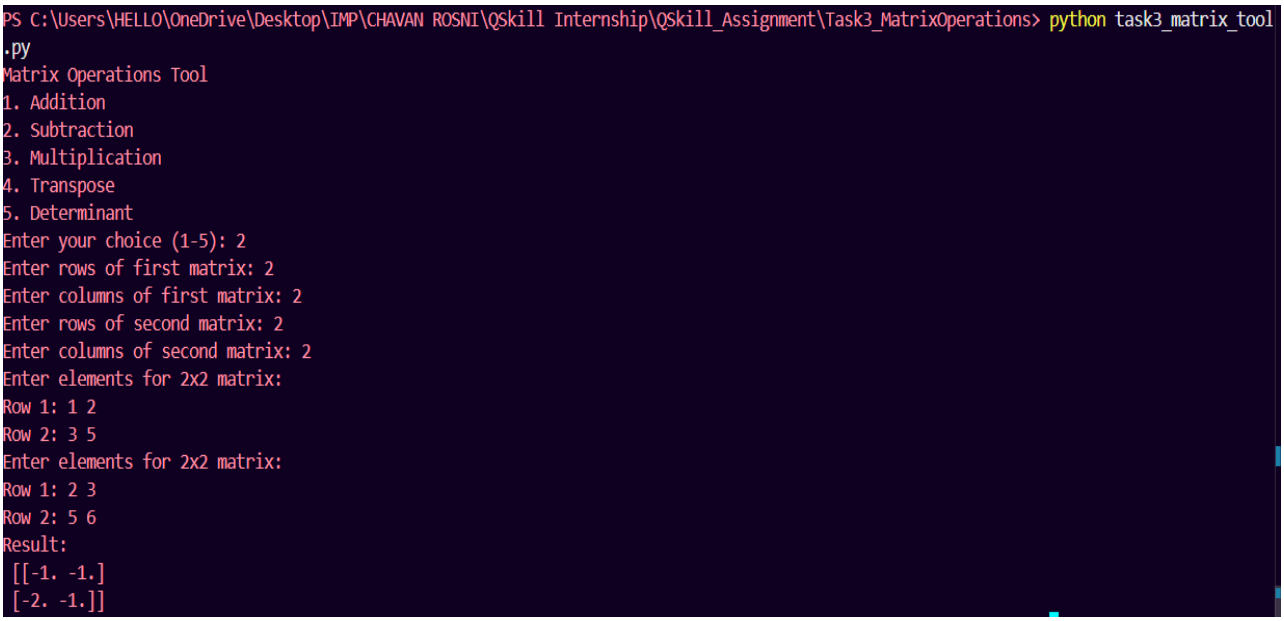
Task 2: House Price Prediction using Linear Regression

- Used numerical house price dataset
- Preprocessed data
- Built Linear Regression model
- Evaluated using R^2 score



Task 3: Matrix Operations Tool

- Developed interactive Python program
- Implemented matrix operations using NumPy
- Ensured input validation



Conclusion

Through this assignment, I gained practical experience in data analysis, machine learning, and numerical computation using Python. The tasks strengthened my understanding of real-world problem solving.