School: SOET Campus: Vzm

Academic Year: 2021/25 Subject Name: DAVP Subject Code: Cutm1012

Semester: 4th Program: B.TECH Branch: ECE Specialization: ECE

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement : Perform exploratory data Analysis (EDA) on a

Coding Phase: Pseudo Code / Flow Chart / Algorithm

→ import libraries: import pandas, seaborn, matplotlib for data handling and visulization

→ load Data: used pd.read_csv(.) to load the student dataset

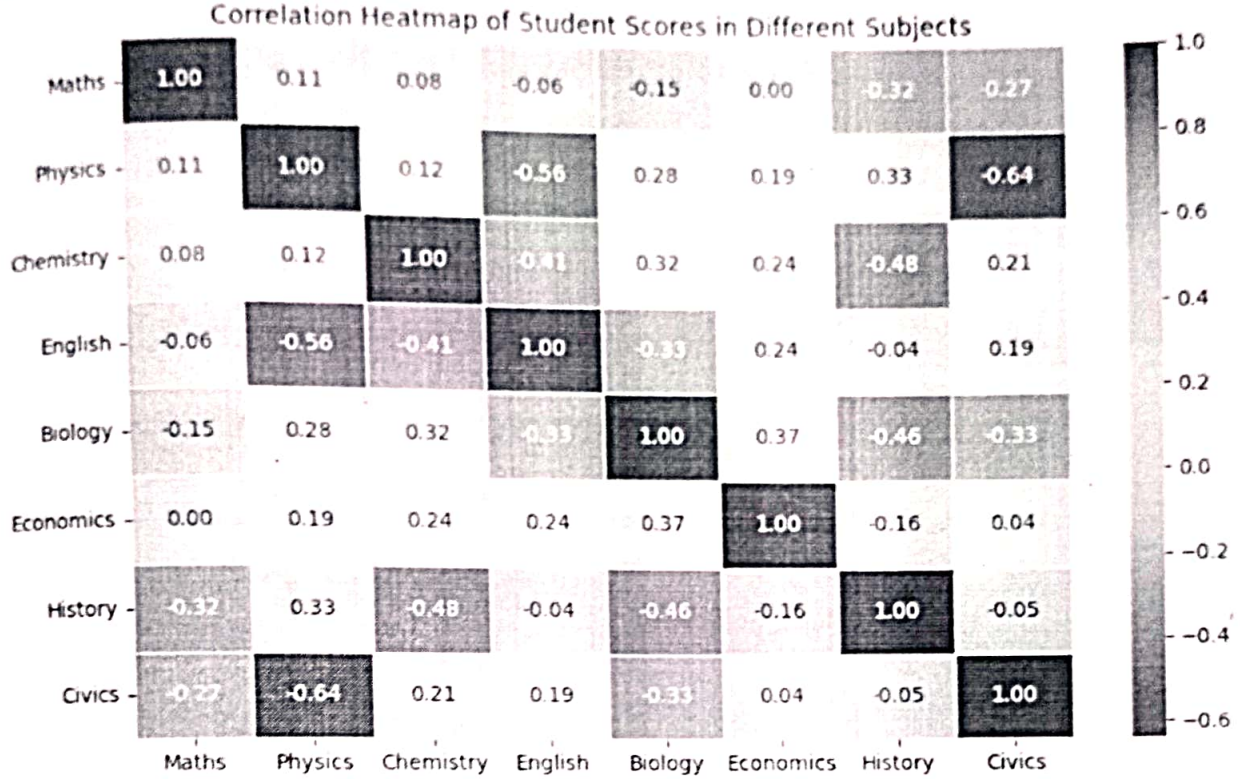
→ clean Data: Drop non-numeric columns.

→ correlation matrix use .corr() to calculate correlations

→ plot the correlation matrix using sns.heatmap() and Display with plt.show().

Testing Phase: Compilation of Code (error detection)

Implementation Phase: Final Output (no error)



ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student: G. Sumanth

Name : G. Sumanth

Regn. No. : 211801131001

Signature of the Faculty:

```
import panday as pd
import seaborn as sns
import matplotlib.pyplot as plt
df = pd.read_csv('student_marks.csv')
df_numeric = df.drop(columns=['unnamed:0', 'Gender', 'DOB'])
Correlation_Matrix = df_numeric.corr()
plt.figure(figsize=(10,6))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm',
            fmt='.2f', cbar=True, linewidths=0.5)
plt.title("correlation Heatmap of student scores in Different Subjects")
plt.show()
```