School: SOET Campus: VZM

Academic Year: 2021-25 Subject Name: DAVP Subject Code: CSTM1018

Semester: 7th Program: B.TECH Branch: ECE Specialization: ECE

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement: Visualize the frequency distribution of ages in a dataset using histogram

Coding Phase: Pseudo Code / Flow Chart / Algorithm

→ import the necessary libraries: 'pandas' for data handling and 'matplotlib.pyplot' for plotting.

→ create a simple dataset with age data in a dictionary and convert it into a pandas data frame.

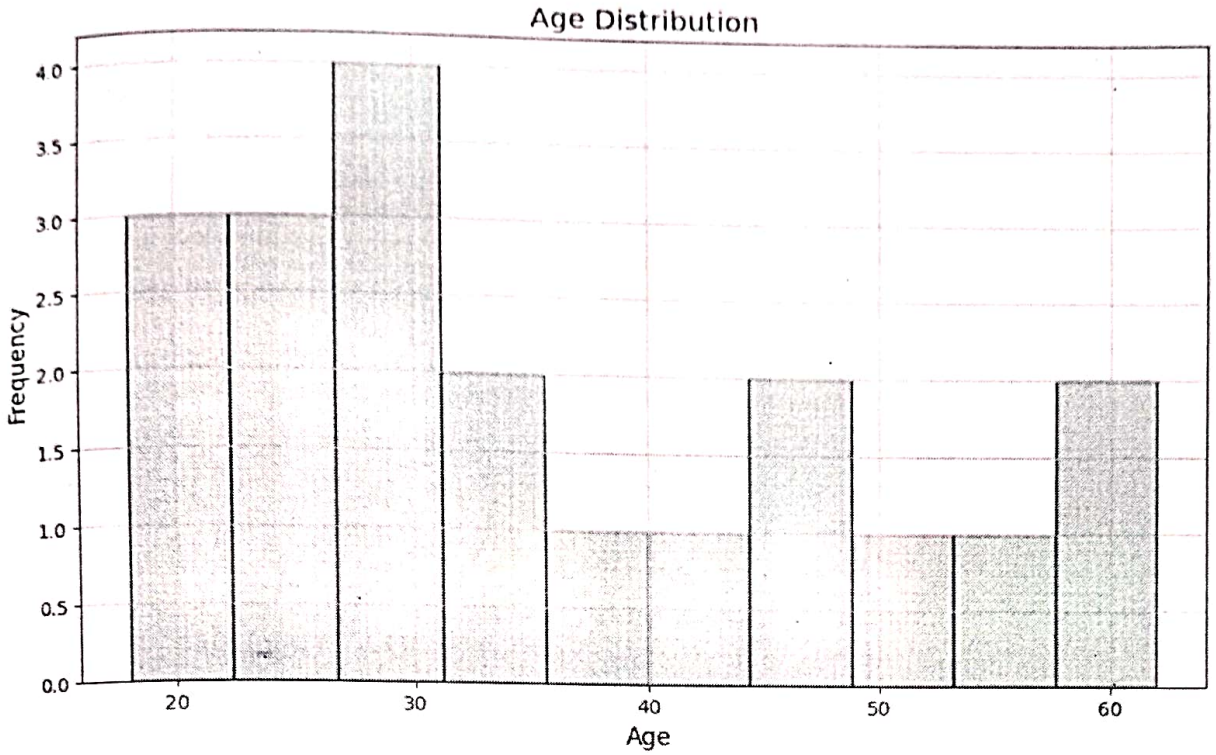
→ use 'plt.hist()' to create a histograms of the 'Age' column, specifying the number of bins and customizing the color and edge of the bars.

→ Add a title, x-axis label, and y-axis label to the plot for better understanding

→ Display the plot using 'plt.show()' and enable grid lines

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. : 21180113/001

Signature of the Faculty:

```
Import pandas as pd
Import matplotlib.pyplot as plt
data = {
    'Age': [23,45,18,34,25,40,28,22,60,55,30,36,29]
}
df = pd.Dataframe(data)
plt.figure(figsize=(10,6))
plt.hist(df['Age'], bins=10, color='skyblue', edgecolor='black')
plt.title('Age Distribution', fontsize=14)
plt.xlabel('Age', fontsize=12)
plt.ylabel('frequency', fontsize=12)
plt.grid(True)
plt.show()
```