



School: SDET Campus: Uzm
Academic Year: 2021/25 Subject Name: DAUP Subject Code: C06m1012
Semester: 7th Program: B.TECH Branch: ECE Specialization: ECE
Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiment: create a scatterplot to analyze the relationship between advertising expenses.

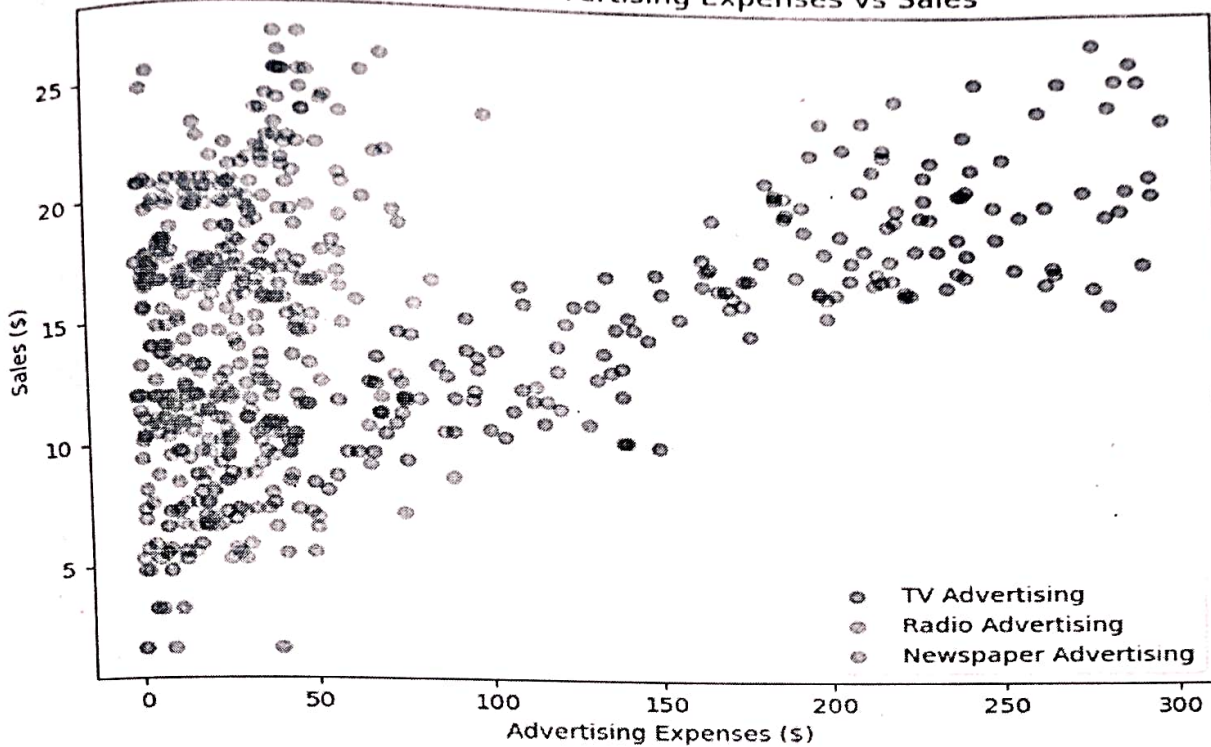
Coding Phase: Pseudo Code / Flow Chart / Algorithm

- Import pandas for data handling and matplotlib for plotting
- load the dataset using `pd.read_csv()` to create a data-frame.
- inspect the dataset by displaying the first few rows with `df.head()`
- create scatterplots for each advertising type against sales using `plt.scatter()`, applying different colors for each types.
- set the `plt.title()` and label the x-axis and y-axis using `plt.xlabel()` and `plt.ylabel()`

Testing Phase: Compilation of Code (error detection)

Implementation Phase: Final Output (no error)

Scatterplot of Advertising Expenses vs Sales



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:

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```
import pandas as pd
```

```
import matplotlib.pyplot as plt
```

```
df = pd.read_csv('advertising.csv')
```

```
print(df.head())
```

```
plt.figure(figsize=(8,6))
```

```
plt.scatter(df['TV'], df['Sales'], color='blue', label='TV  
Advertising', alpha=0.5)
```

```
plt.scatter(df['Radio'], df['Sales'], color='red', label='Radio  
Advertising', alpha=0.5)
```

```
plt.scatter(df['Newspaper'], df['Sales'], color='green', label=  
'Newspaper Advertising', alpha=0.5)
```

```
plt.title('Scatterplot of Advertising Expenses vs Sales')
```

```
plt.xlabel('Advertising Expenses ($)')
```

```
plt.ylabel('Sales ($)')
```

```
plt.legend()
```

```
plt.show()
```