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OUTPUT DEBUG CONSOLE TERMINAL PORTS Python Debug Console + × ... | [ ] X
Predicted Marks for new data: 79.083663003663
● PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2\Assignment 2> c:;
cd 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\Assignment 2'; & 'c:\Users\zumer\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\zumer\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '59586' '--' 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\Assignment 2\vscode\analysis.py'
Coefficients (b1, b2, b3): [ 112.54077157 32787.76290631 -2299.51636486]
Intercept (b0): 114290.06860870571
Predicted Price for (2000 sqft, 3 bedrooms, 10 years old): 414739.74

Interpretation of Coefficients:
Size Coefficient (112.54): Price increases by this amount per additional sqft.
Bedroom Coefficient (32787.76): Price increases by this amount per additional bedroom.
Age Coefficient (-2299.52): Price decreases by this amount per extra year of age.
○ PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2\Assignment 2>
```

Ln 29, Col 24 Spaces: 4 UTF-8 CRLF { } Python 3.13.2 ⚙ Go Live

analysis2.py X



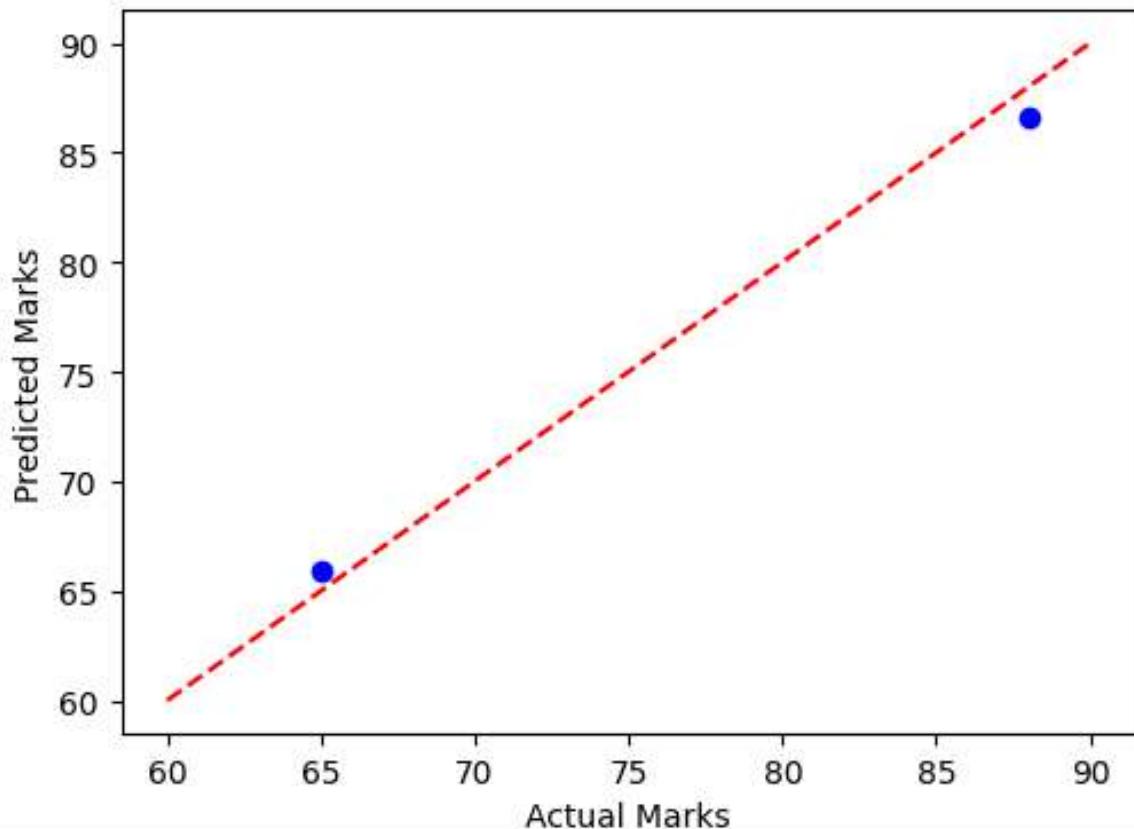
analysis2.py > ...

```
1 import pandas as pd
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```
2 # Figure 1
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Actual vs Predicted Marks



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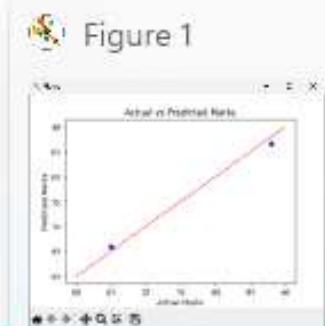
OUTPUT DEBUG CONSOLE TERMINAL PORTS

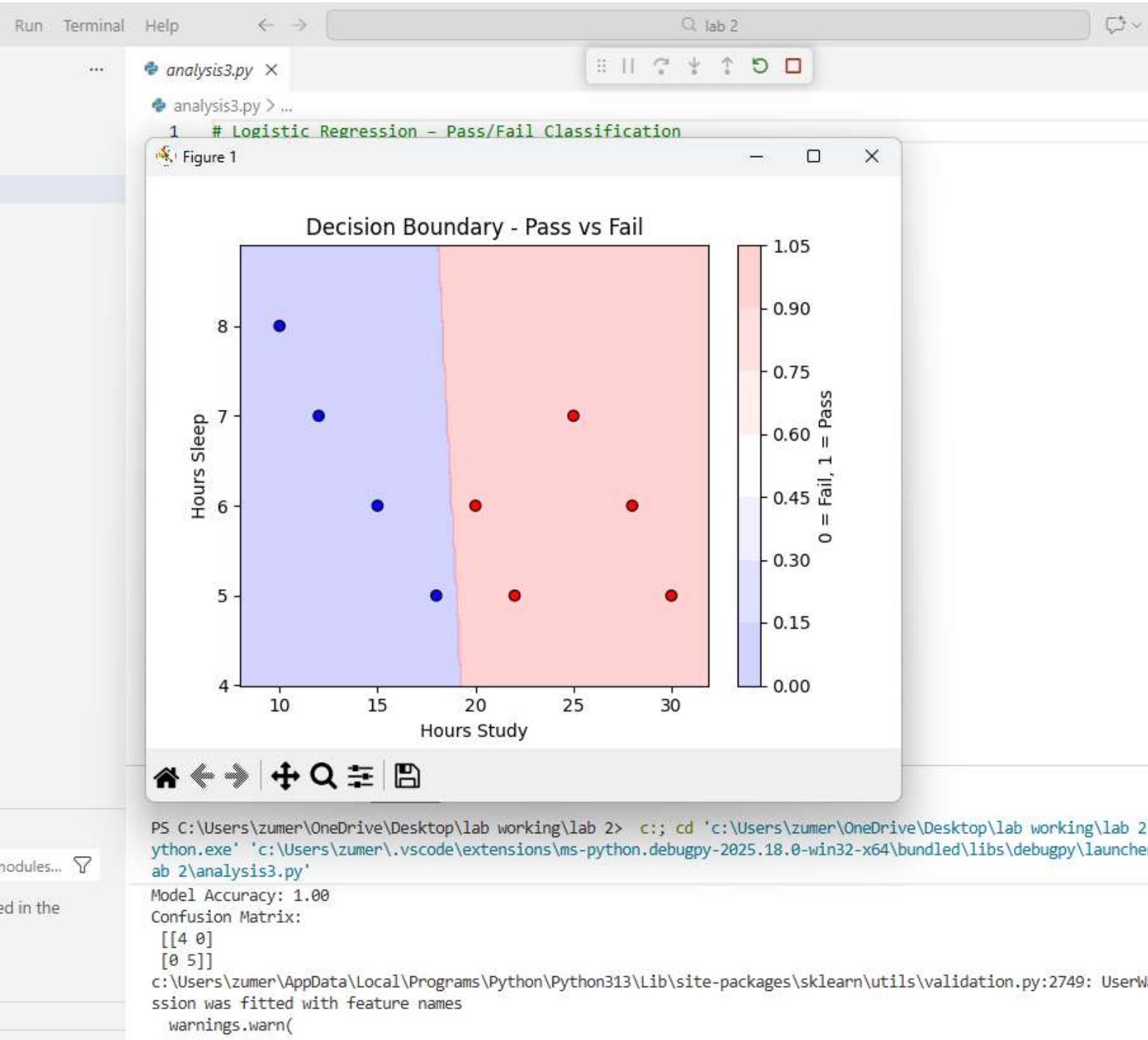
```
PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2> & 'c:\Users\zumer\AppData\Local\Programs\Python\Python311\python.exe' 'C:/Users/zumer/Desktop/lab working/analysis2.py'
```

4	6	6	88
5	7	5	90
6	8	5	92
7	9	4	94
8	10	4	95
9	11	3	97

R² Score: 0.9898645431051172

Mean Squared Error: 1.3404141743482463





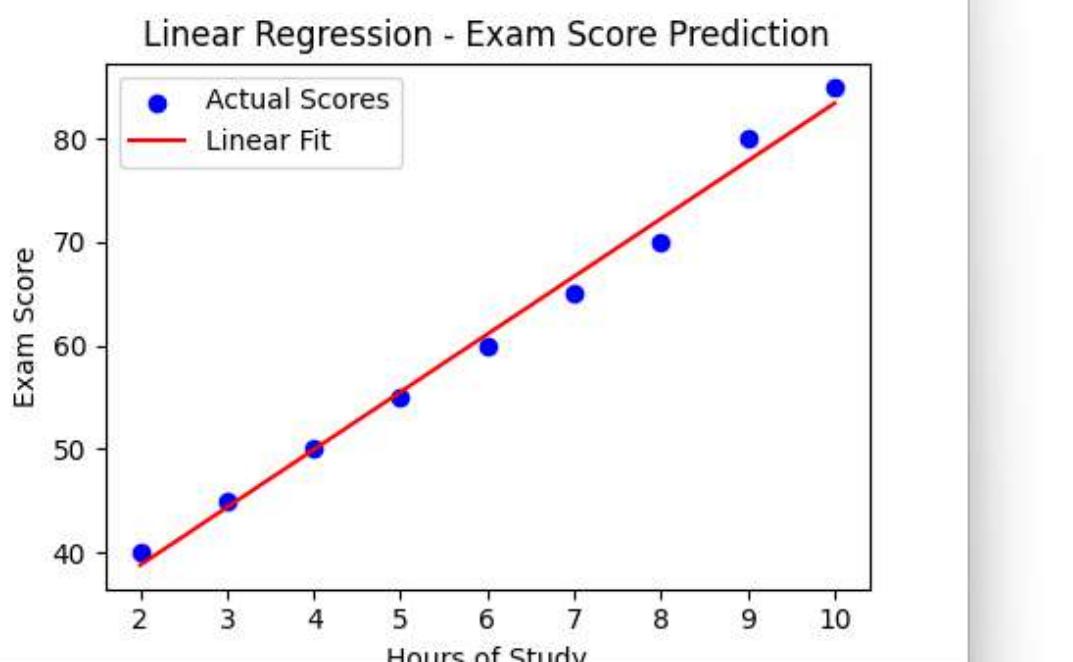
```
analysis5.py X
```



```
analysis5.py > ...
```

```
1 # Q5. Comparison - Linear vs Logistic Regression
2
3 import pandas as pd
4 import numpy as np
5 import matplotlib.pyplot as plt
```

```
6 Figure 1
```



```
27 OUTPUT DEBUG CONSOLE TERMINAL PORTS
```

```
PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2> c;; cd 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2'; python 'c:\Users\zumer\vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\56739' -- 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\analysis5.py'
```

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7         9     80     1
8        10     85     1
```

```
c:\Users\zumer\AppData\Local\Programs\Python\Python313\Lib\site-packages\sklearn\utils\validation.py:2749: UserWarning: You have passed a column vector as argument feature names, but LinearRegression was fitted with feature names
warnings.warn(
```

```
Predicted Exam Score for 8 hours study: 72.28
```

analysis5.py X



analysis5.py > ...

```
1 # Q5. Comparison - Linear vs Logistic Regression
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2
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```
3 import pandas as pd
```

```
4 import numpy as np
```

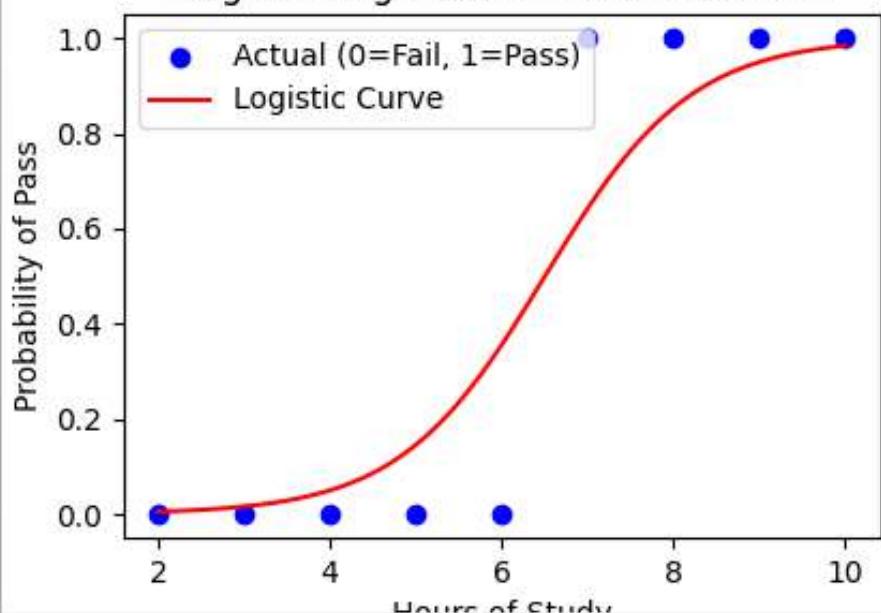
```
5 import matplotlib.pyplot as plt
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Figure 1

cRegression
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Logistic Regression - Pass Prediction



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```
23 lin reg = LinearRegression()
```

OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2> c:; cd 'c:\Users\zumer\OneDrive\Desktop\lab work  
1\Programs\Python\Python313\python.exe' 'c:\Users\zumer\.vscode\extensions\ms-python.debugpy-2025.18.0-  
56739' '--' 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\analysis5.py'
```

```
Logistic Regression Accuracy: 1.00
```

```
Confusion Matrix:
```

```
[[5 0]  
[0 4]]
```

```
c:\Users\zumer\AppData\Local\Programs\Python\Python313\Lib\site-packages\sklearn\utils\validation.py:27  
ture names, but LogisticRegression was fitted with feature names  
warnings.warn(
```