

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\bundle\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

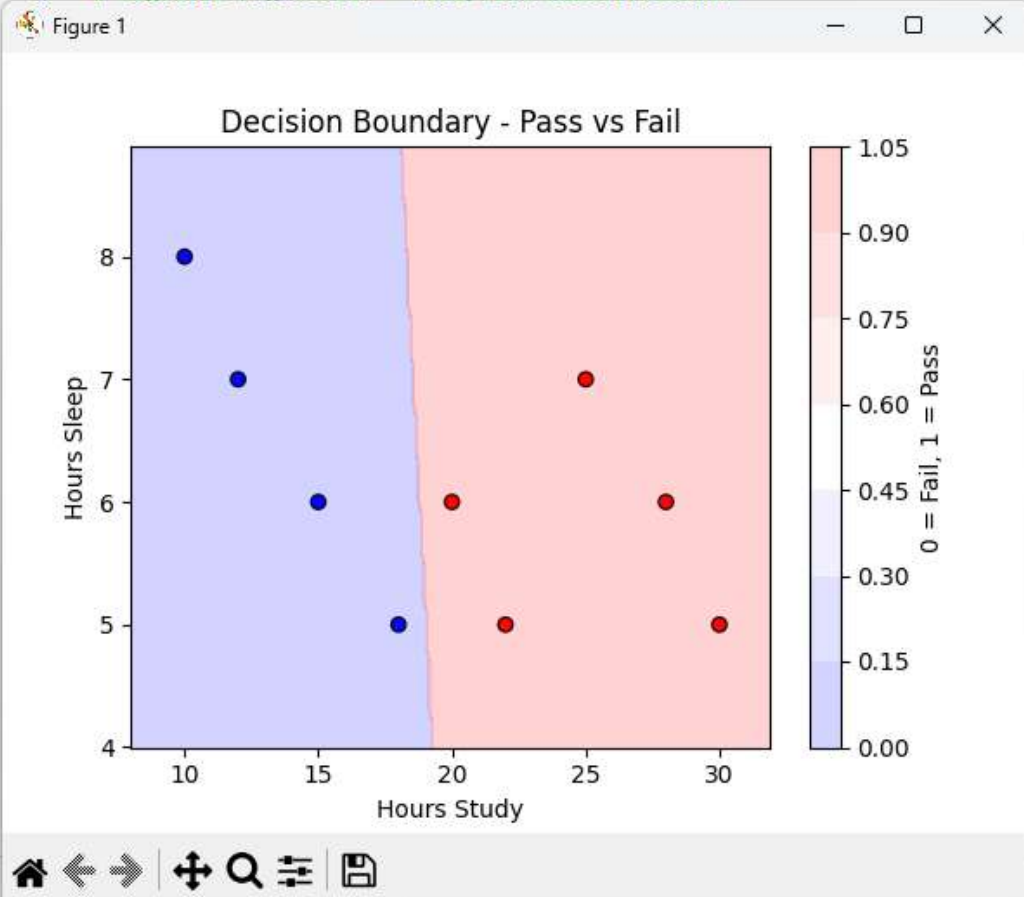
Interpretation of Coefficients:
Size Coefficient (112.54): Price increases by this amount per additional sqft.
Bedroom Coefficient (32787.76): Price increases by this amount per additional bedroom.
Age Coefficient (-2299.52): Price decreases by this amount per extra year of age.
PS C:\Users\zumer\OneDrive\Desktop\lab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

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

analysis3.py X

analysis3.py > ...

```
1 # Logistic Regression - Pass/Fail Classification
```



```
PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2> c::; cd 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2';  
python.exe 'c:\Users\zumer\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher'  
lab 2\analysis3.py'
```

Model Accuracy: 1.00

Confusion Matrix:

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

```
c:\Users\zumer\AppData\Local\Programs\Python\Python313\Lib\site-packages\sklearn\utils\validation.py:2749: UserWarning:  
ssion was fitted with feature names  
warnings.warn(
```

analysis5.py X



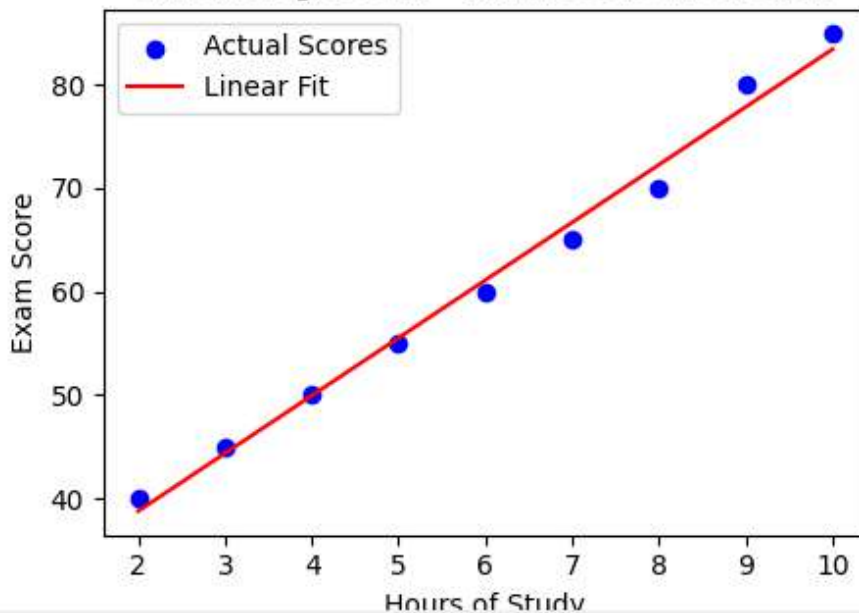
analysis5.py > ...

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

Figure 1

— □ × regression

Linear Regression - Exam Score Prediction



(x, y) = (4.88, 49.1)

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```
PS C:\Users\zumer\OneDrive\Desktop\lab working\lab 2> c:: cd 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\Programs\Python\Python313\python.exe' 'c:\Users\zumer\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bin\python.exe' '--' 'c:\Users\zumer\OneDrive\Desktop\lab working\lab 2\analysis5.py'
```

```
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: Using deprecated 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
```

```
2
```

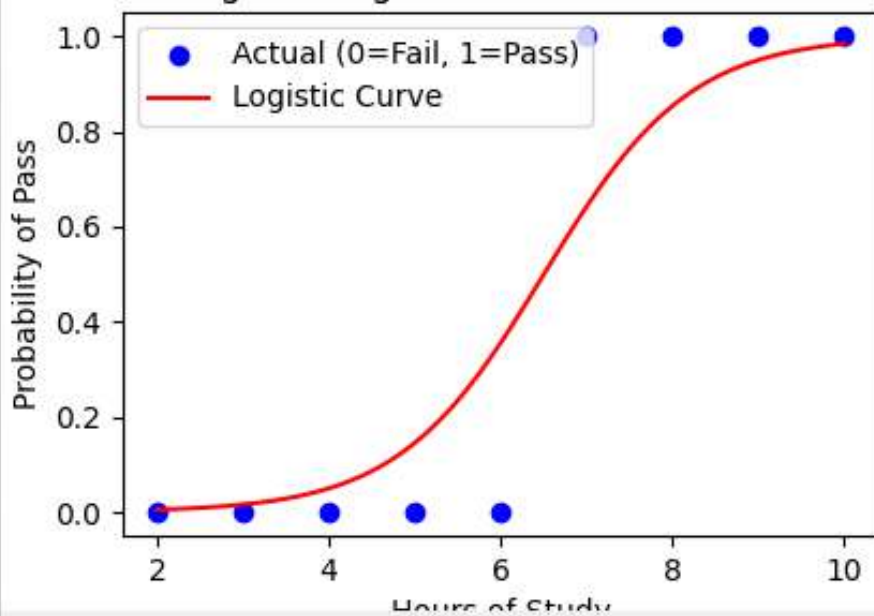
```
3 import pandas as pd
```

```
4 import numpy as np
```

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

Figure 1

Logistic Regression - Pass Prediction



```
27 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
l\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(