```
 1 D:\Project\Amazon\.venv\Scripts\python.exe D:\Project
   \Amazon\Model_Development.py
 2 D:\Project\Amazon\.venv\Lib\site-packages\sklearn\
   preprocessing\_encoders.py:246: UserWarning: Found
   unknown categories in columns [8, 9] during transform
   . These unknown categories will be encoded as all
   zeros
 3   warnings.warn(
 4 2025/09/28 14:08:34 WARNING mlflow.models.model: `
   artifact_path` is deprecated. Please use `name`
   instead.
 5 2025/09/28 14:08:53 WARNING mlflow.models.model:
   Model logged without a signature and input example.
   Please set `input_example` parameter when logging the
    model to auto infer the model signature.
 6 Linear Regression Performance:
 7   MAE: 28.93
 8   RMSE: 36.69
 9   R2: 0.49
10 ========================================
11 D:\Project\Amazon\.venv\Lib\site-packages\sklearn\
   preprocessing\_encoders.py:246: UserWarning: Found
   unknown categories in columns [8, 9] during transform
   . These unknown categories will be encoded as all
   zeros
12   warnings.warn(
13 2025/09/28 14:47:15 WARNING mlflow.models.model: `
   artifact_path` is deprecated. Please use `name`
   instead.
14 2025/09/28 14:47:28 WARNING mlflow.models.model:
   Model logged without a signature and input example.
   Please set `input_example` parameter when logging the
    model to auto infer the model signature.
15 Random Forest Performance:
16   MAE: 17.23
17   RMSE: 22.52
18   R2: 0.81
19 ========================================
20 D:\Project\Amazon\.venv\Lib\site-packages\sklearn\
   preprocessing\_encoders.py:246: UserWarning: Found
   unknown categories in columns [8, 9] during transform
```

```
20  . These unknown categories will be encoded as all
    zeros
21    warnings.warn(
22 2025/09/28 14:48:06 WARNING mlflow.models.model: `
    artifact_path` is deprecated. Please use `name`
    instead.
23 2025/09/28 14:48:15 WARNING mlflow.models.model:
    Model logged without a signature and input example.
    Please set `input_example` parameter when logging the
     model to auto infer the model signature.
24 Gradient Boosting Performance:
25    MAE: 19.67
26    RMSE: 25.08
27    R2: 0.76
28 ========================================
29
30 Best model selected: Random Forest with R2 = 0.81
31 2025/09/28 14:48:15 WARNING mlflow.models.model: `
    artifact_path` is deprecated. Please use `name`
    instead.
32 2025/09/28 14:48:26 WARNING mlflow.models.model:
    Model logged without a signature and input example.
    Please set `input_example` parameter when logging the
     model to auto infer the model signature.
33 Best model saved as best_model.pkl
34
35 Process finished with exit code 0
36
```