OUTPUTS

Problem Statement 1: AI-Based Chatbot for Customer Support

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\DIYA GOPAL\OneDrive\Desktop\AAIML> & "C:/Users/DIYA GOPAL/AppData/Local/Microsoft
ment_1.py"
You: Hello
Bot: Greetings of the day!! How can I help you?
You: How can I reset my password?
Bot: To reset your password, click on 'Forgot Password' at login.
You: Where is my order?
Bot: You can track your order in the 'My Orders' section.
You: Can I change my shipping address?
Bot: Yes, you can change your shipping address before the order is shipped.
You: Thank you
Bot: Have a Nice day!!
You:
```

Problem Statement 2: AI-Based Fraud Detection in Banking Transactions

```
Class
0    284315
1       492
Name: count, dtype: int64
```


```
Resampled dataset shape: Class
0    284315
1    284315
Name: count, dtype: int64
```

```
RandomForestClassifier
RandomForestClassifier(random_state=42)
```

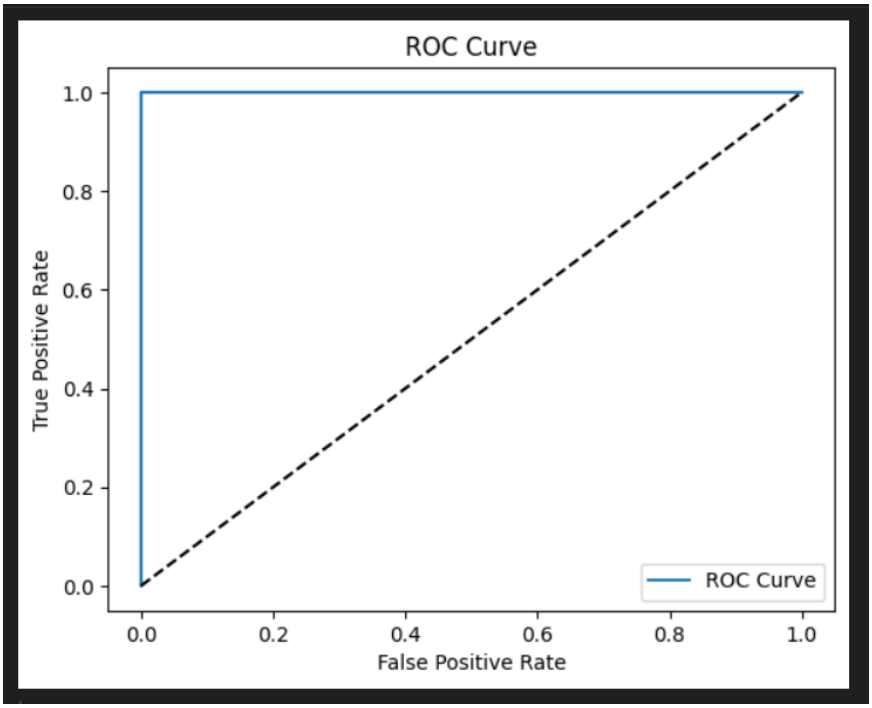
```
Confusion Matrix:
 [[56738    12]
 [    0 56976]]

Classification Report:
              precision    recall  f1-score   support

           0       1.00      1.00      1.00     56750
           1       1.00      1.00      1.00     56976

    accuracy                           1.00    113726
   macro avg       1.00      1.00      1.00    113726
weighted avg       1.00      1.00      1.00    113726


ROC-AUC Score: 0.9999990581087081
```




```
example_transaction = [
    -1.35980713, -0.07278117, 2.53634674, 1.37815522, -0.33832077, 0.46238778,
    0.23959855, 0.0986979, 0.36378697, 0.09079417, -0.55159953, -0.61780086,
    -0.99138985, -0.31116935, 1.46817697, -0.47040053, 0.20797124, 0.02579058,
    0.40399296, 0.2514121, -0.01830678, 0.27783758, -0.11047391, 0.06692808,
    0.12853936, -0.18911484, 0.13355838, -0.02105305, 0.01472417
]

print("Transaction prediction:", predict_fraud(example_transaction))
```

```
[23] ✓ 0.0s

Transaction prediction: Normal
c:\Users\DIYA GOPAL\OneDrive\Desktop\AAIML\.venv\Lib\site-packages\sklearn\utils\validation.py:2739:
  warnings.warn(
```