2   Improved model for Chandler saved to Models\
     Chandler_model.pkl

3

4   Test set - Model performance for Chandler:

5   Number of samples in Train dataset: 496

6   Number of samples in Dev dataset: 42

7   Number of samples in Test dataset: 143

8   Accuracy: 0.8811188811188811

9   Precision: 1.0

10 Recall: 0.5

11 F1-score: 0.6666666666666666

12 ROC AUC: 0.75

13 Improved model for Joey saved to Models\
     Joey_model.pkl

14

15 Test set - Model performance for Joey:

16 Number of samples in Train dataset: 606

17 Number of samples in Dev dataset: 60

18 Number of samples in Test dataset: 167

19 Accuracy: 0.7305389221556886

20 Precision: 0.6218487394957983

21 Recall: 1.0

22 F1-score: 0.7668393782383419

23 ROC AUC: 0.7580645161290323

24 Improved model for Ross saved to Models\
     Ross_model.pkl

25

26 Test set - Model performance for Ross:

27 Number of samples in Train dataset: 596

28 Number of samples in Dev dataset: 103
29 Number of samples in Test dataset: 154
30 Accuracy: 0.7662337662337663
31 Precision: 0.6086956521739131
32 Recall: 1.0
33 F1-score: 0.7567567567567568
34 ROC AUC: 0.8163265306122449
35 Improved model for Phoebe saved to Models\
    Phoebe_model.pkl
36
37 Test set - Model performance for Phoebe:
38 Number of samples in Train dataset: 563
39 Number of samples in Dev dataset: 84
40 Number of samples in Test dataset: 122
41 Accuracy: 0.7786885245901639
42 Precision: 1.0
43 Recall: 0.46
44 F1-score: 0.6301369863013698
45 ROC AUC: 0.73
46 Improved model for other_speakers saved to
    Models\other_speakers_model.pkl
47
48 Test set - Model performance for other_speakers:
49 Number of samples in Train dataset: 622
50 Number of samples in Dev dataset: 61
51 Number of samples in Test dataset: 149
52 Accuracy: 0.7718120805369127
53 Precision: 0.6565656565656566
54 Recall: 1.0

```
55  F1-score: 0.7926829268292683
56  ROC AUC: 0.7976190476190477
57  Improved model for Monica saved to Models\
    Monica_model.pkl
58
59  Test set - Model performance for Monica:
60  Number of samples in Train dataset: 561
61  Number of samples in Dev dataset: 61
62  Number of samples in Test dataset: 162
63  Accuracy: 0.8209876543209876
64  Precision: 1.0
65  Recall: 0.48214285714285715
66  F1-score: 0.6506024096385542
67  ROC AUC: 0.7410714285714286
68  Improved model for Rachel saved to Models\
    Rachel_model.pkl
69
70  Test set - Model performance for Rachel:
71  Number of samples in Train dataset: 630
72  Number of samples in Dev dataset: 78
73  Number of samples in Test dataset: 176
74  Accuracy: 0.7897727272727273
75  Precision: 0.96875
76  Recall: 0.4626865671641791
77  F1-score: 0.6262626262626263
78  ROC AUC: 0.7267561276187868
79
```