```
1 C:\Users\J\Desktop\Major\venv\Scripts\python.exe C:\
  Users\J\Desktop\Major\text_informative_LSTM.py
2 Model: "sequential"
4 Layer (type)
                     Output Shape
           Param #
6 embedding (Embedding) (None, 27, 128
         256000
7
8 lstm (LSTM)
                     (None, 128
            131584
9
                     (None, 2
10 dense (Dense)
             258
11
=========
13 Total params: 387,842
14 Trainable params: 387,842
15 Non-trainable params: 0
16 ______
17 None
18 Epoch 1/20
19 341/341 [============== ] - 22s 54ms/
  step - loss: 0.4600 - accuracy: 0.7908
20 Epoch 2/20
step - loss: 0.3584 - accuracy: 0.8457
22 Epoch 3/20
step - loss: 0.3194 - accuracy: 0.8659
24 Epoch 4/20
step - loss: 0.2878 - accuracy: 0.8808
```

```
26 Epoch 5/20
step - loss: 0.2518 - accuracy: 0.8969
28 Epoch 6/20
step - loss: 0.2264 - accuracy: 0.9061
30 Epoch 7/20
step - loss: 0.2006 - accuracy: 0.9170
32 Epoch 8/20
33 341/341 [============== ] - 17s 50ms/
 step - loss: 0.1795 - accuracy: 0.9272
34 Epoch 9/20
step - loss: 0.1620 - accuracy: 0.9315
36 Epoch 10/20
step - loss: 0.1464 - accuracy: 0.9403
38 Epoch 11/20
39 341/341 [============= ] - 17s 50ms/
 step - loss: 0.1214 - accuracy: 0.9510
40 Epoch 12/20
step - loss: 0.1117 - accuracy: 0.9585
42 Epoch 13/20
step - loss: 0.0986 - accuracy: 0.9629
44 Epoch 14/20
step - loss: 0.0885 - accuracy: 0.9681
46 Epoch 15/20
step - loss: 0.0774 - accuracy: 0.9712
48 Epoch 16/20
step - loss: 0.0688 - accuracy: 0.9745
50 Epoch 17/20
step - loss: 0.0604 - accuracy: 0.9788
52 Epoch 18/20
```

```
53 step - loss: 0.0518 - accuracy: 0.9815
54 Epoch 19/20
55 341/341 [============= ] - 19s 57ms/
  step - loss: 0.0498 - accuracy: 0.9819
56 Epoch 20/20
57 341/341 [============= ] - 18s 54ms/
  step - loss: 0.0463 - accuracy: 0.9838
58 86/86 [============= ] - 4s 12ms/step
   - loss: 1.0368 - accuracy: 0.8196
59 [1.0367531776428223, 0.8196179270744324]
60 Test accuracy: 0.8196179270744324
62
                         recall f1-score
              precision
                                          support
63
64
            0
                   0.86
                           0.89
                                    0.88
                                             1926
65
            1
                   0.71
                           0.64
                                    0.67
                                             796
66
67
                                    0.82
                                             2722
     accuracy
                                    0.77
                                             2722
68
                  0.79
                           0.77
     macro avq
                  0.82
                           0.82
                                    0.82
69 weighted avg
                                             2722
70
71
72 Process finished with exit code 0
73
```