

1.1 Accuracy

The accuracy is 0.95

So we can find that the accuracy of the recognition performance is 0.95

1.2 confusion matrix

```
[[109  0  0  0  0  0  2  0  0  0]
 [  0 93  1  0  0  0  0  0  0  0]
 [  0  1 76  0  0  0  0  1  2  1]
 [  0  2  0 107  0  1  1  1  0  0]
 [  0  2  0  0 95  0  2  0  0  6]
 [  0  0  0  3  2 99  0  0  0  1]
 [  0  0  0  0  0  1 97  0  0  0]
 [  0  5  0  0  0  0  0 90  0  3]
 [  0  2  0  2  0  2  0  0 102  3]
 [  0  0  0  0  2  1  0  1  0 81]]
```

The confusion matrix for the recognition performance is shown above.

1.3 per-class precision and recall

	precision	recall	f1-score	support
0	1.00	0.98	0.99	111
1	0.89	0.99	0.93	94
2	0.99	0.94	0.96	81
3	0.96	0.96	0.96	112
4	0.96	0.90	0.93	105
5	0.95	0.94	0.95	105
6	0.95	0.99	0.97	98
7	0.97	0.92	0.94	98
8	0.98	0.92	0.95	111
9	0.85	0.95	0.90	85
micro avg	0.95	0.95	0.95	1000
macro avg	0.95	0.95	0.95	1000
weighted avg	0.95	0.95	0.95	1000

The result of precision and recall I got is shown above