

```

1 C:\Users\51346\AppData\Local\Programs\Python\
  Python37\python.exe E:/Fall2020/MachineL/
  MLnotes/mnist.py
2 report confusion_matrix:
3 [[2318      5    13    46      6   116   202      6    35
   25]
4  [    0 3162      3     8     6     4     3     5    23
   3]
5  [   57   212 1753   140   106    29   47   264   118
   82]
6  [   13    50   42 2187    16   157   12   119   132
   59]
7  [    4    80     2     4 2114    10   42   54   10
   419]
8  [   36    90     2   294    64 1693    61   18   125
   134]
9  [   86    60    20    41    52    65 2344     2   14
   32]
10 [    7   132     4    11   101    10     0 2094     3
   533]
11 [   28   159    47   166    49   203    60    68 1742
   234]
12 [   18    39    12    35   438    34     5   210    11
   1991]]
13
14
15
16
17
18
19

```

	support	precision	recall	f1-score
	0	0.90	0.84	0.87
	2772			
	1	0.79	0.98	0.88
	3217			
	2	0.92	0.62	0.75
	2808			
	3	0.75	0.78	0.76
	2787			
	4	0.72	0.77	0.74
	2739			

20	5	0.73	0.67	0.70
	2517			
21	6	0.84	0.86	0.85
	2716			
22	7	0.74	0.72	0.73
	2895			
23	8	0.79	0.63	0.70
	2756			
24	9	0.57	0.71	0.63
	2793			
25				
26	accuracy			0.76
	28000			
27	macro avg	0.77	0.76	0.76
	28000			
28	weighted avg	0.78	0.76	0.76
	28000			
29				
30	accuracy:			
31	0.7642142857142857			
32	2020-10-11 18:52:47			
33	0:21:12.591278			
34				
35	Process finished with exit code 0			
36				