

```
>> example5_1_3
```

```
Loading data/mnist/train-labels-idx1-ubyte
```

```
Loading data/mnist/train-images-idx3-ubyte
```

```
Loading data/mnist/t10k-labels-idx1-ubyte
```

```
Loading data/mnist/t10k-images-idx3-ubyte
```

```
TRAIN_NUM =
```

```
1800
```

```
TEST_NUM =
```

```
360
```

```
train_res_mat =
```

```
Columns 1 through 5
```

5685	1	55	33	9
1	6551	27	18	30
13	51	5318	172	43
8	24	84	5380	7
14	8	81	8	5373
32	35	33	204	12
89	8	107	53	93
13	12	108	70	19
52	39	126	126	35
16	13	19	67	221

```
Columns 6 through 10
```

73	59	25	44	45
43	40	56	82	36
81	68	78	76	26
194	2	30	134	71
82	51	71	44	190
4512	92	9	135	56
152	5556	11	83	19
30	7	5828	19	118
178	41	23	5139	72
76	2	134	95	5316

```
train_accuracy =
```

```
0.9110
```

```
test_res_mat =
```

18	0	0	0	0	1	0	0	0	0
0	13	0	1	0	0	0	9	0	3
6	2	23	7	1	3	1	14	2	2

4	0	2	20	1	3	1	8	4	7
0	0	0	0	15	0	3	0	0	0
1	9	0	2	1	13	9	1	4	6
5	8	2	1	5	9	15	3	9	2
0	0	3	1	1	3	1	3	1	3
0	6	2	2	2	4	3	1	12	11
7	2	0	0	5	0	0	2	2	4

```
test_accuracy =
```

```
0.3778
```

```
>>
```