Task 2.1

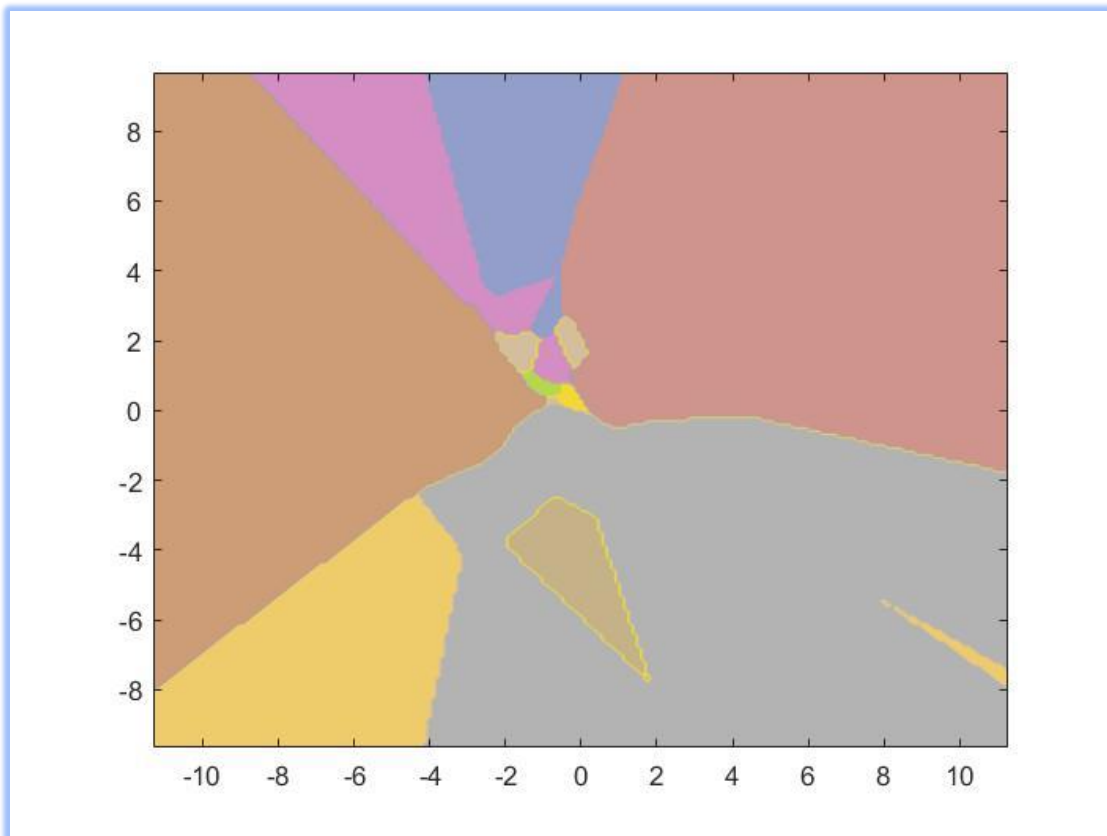| k	Time [seconds]	N	No. of errors	Accuracy
1	7.203882	3966	149	0.9624
3	7.229930	3966	143	0.9639
5	7.213365	3966	158	0.9602
10	7.198029	3966	161	0.9594
20	7.197253	3966	178	0.9551

Task 2.2

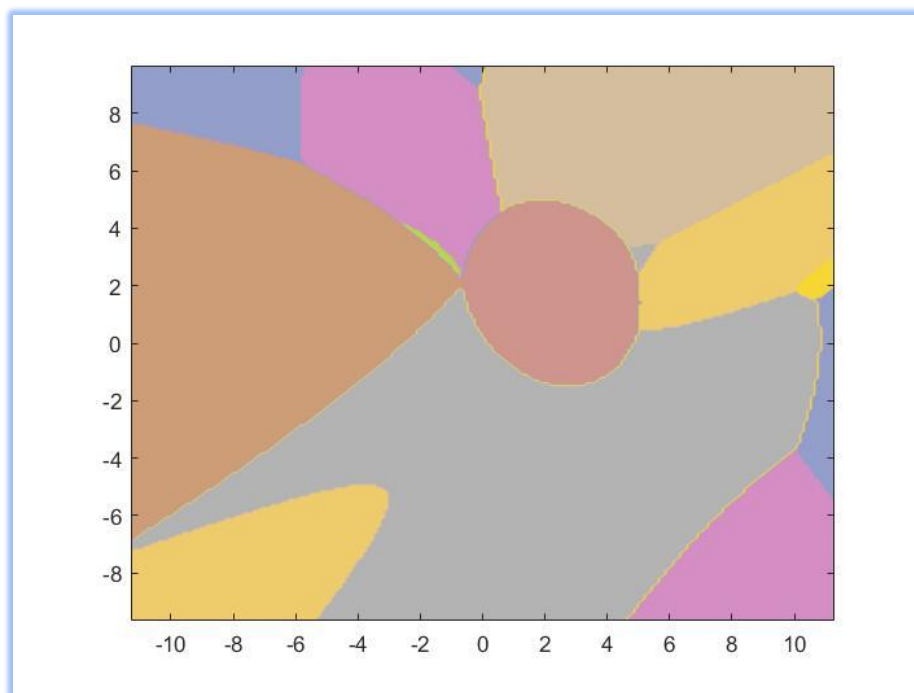N = 2000 was used

Figure 1: k = 1
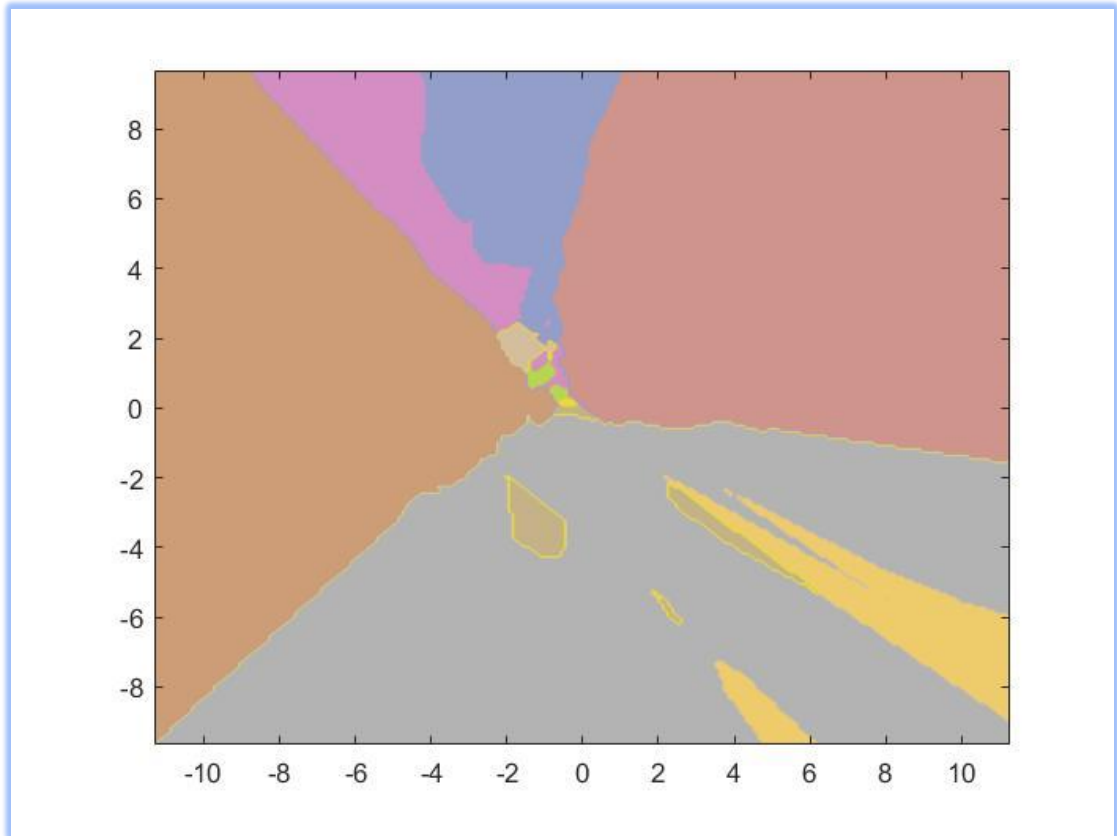
Figure 2: k = 2

Task 2.3
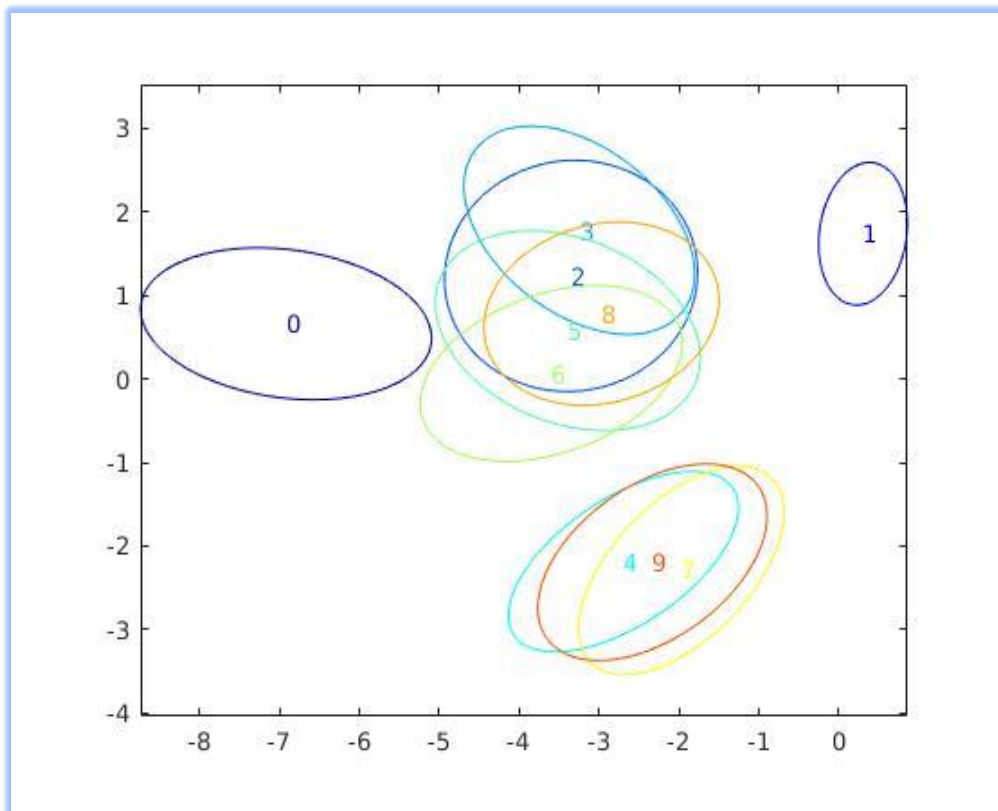
Task 2.4

Class	Correlation
1	-0.1900
2	0.1456
3	0.0296
4	-0.4208
5	0.5959
6	-0.2738
7	0.3426
8	0.5598
9	0.1515
10	0.4693
Xtrn (whole data set)	9.5716e-17

Task 2.5

Time = 1.274178 seconds; N = 3966; Nerrs = 199; acc = 0.9498

Task 2.6

Task2.7

Ratio	Classification accuracy
0.9	0.9500
0.8	0.9495
0.7	0.9498
0.6	0.9478
0.5	0.9483
0.4	0.9475
0.3	0.9480

Task 2.8

L	Time [seconds]	No. of errors	Accuracy
2	8.090305	182	0.9541
5	19.782091	132	0.9667
10	31.210881	100	0.9748