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Inf-2B

Coursework 2

Task 2 -Classification

Task 2.1

(Measured on a 2013 Macbook Pro)

Command Window

```
>> task2_1(Xtrn, Ytrn, Xtst, Ytst, Ks);
```

```
Elapsed time is 30.799240 seconds.
```

```
K = 1
```

```
N = 4016
```

```
Nerrs = 144
```

```
acc = 0.96414
```

```
K = 3
```

```
N = 4016
```

```
Nerrs = 130
```

```
acc = 0.96763
```

```
K = 5
```

```
N = 4016
```

```
Nerrs = 127
```

```
acc = 0.96838
```

```
K = 10
```

```
N = 4016
```

```
Nerrs = 134
```

```
acc = 0.96663
```

```
K = 20
```

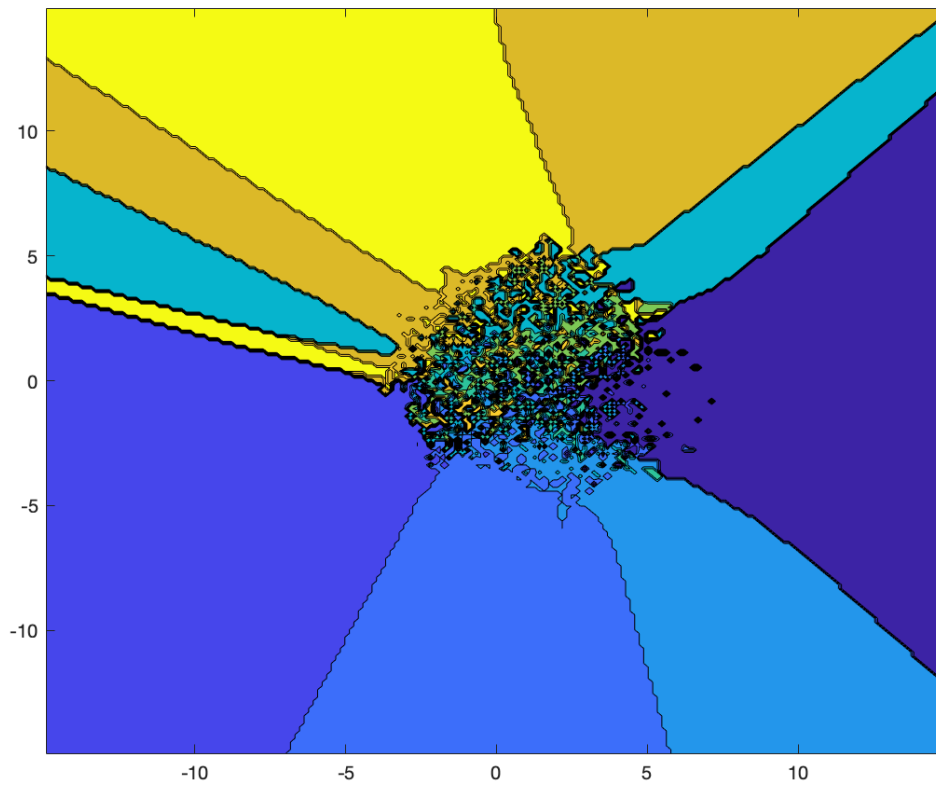
```
N = 4016
```

```
Nerrs = 156
```

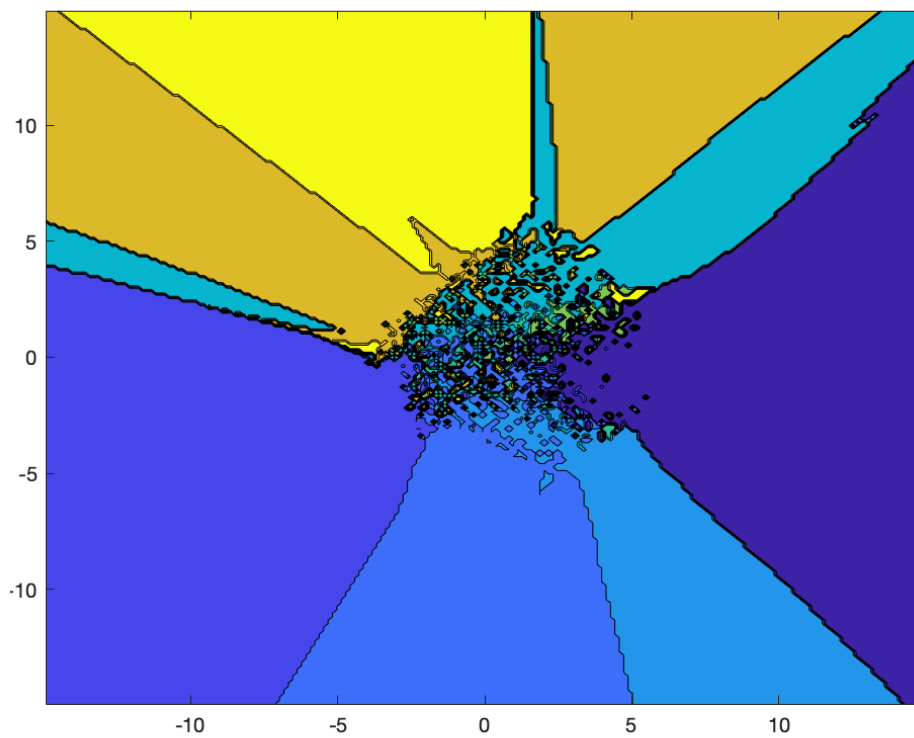
```
acc = 0.96116
```

```
 >>
```

Task 2.2



1 nearest neighbour for K-NN



3 nearest neighbour for K-NN