

Automation Homework 2

Name: Yinjie Gao

Andrew ID: yinjieg

Part 1

1.2 Final Accuracies:

Uncertainty:

0.6693877551020408

Entropy:

0.6448979591836734

Margin:

0.7142857142857143

Random:

0.5591836734693878

1.3 Confusion Matrices:

(Seed = 0)

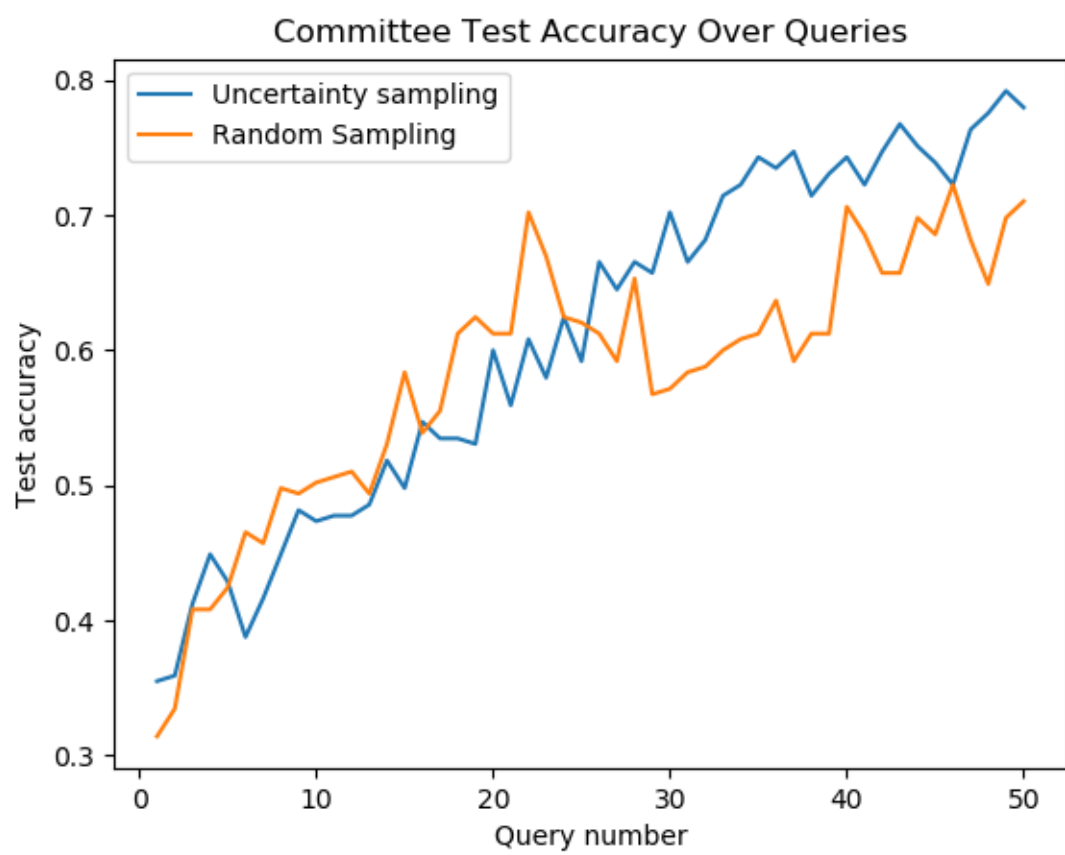
```
[[ 8 0 0 0 0 0 0 3 2 15]
 [ 0 14 0 8 0 0 0 0 0 0]
 [ 0 1 0 0 0 9 0 16 0 0]
 [ 0 22 0 2 0 1 0 0 0 0]
 [ 0 10 0 3 1 3 0 0 0 0]
 [ 0 6 0 2 1 18 0 0 0 0]
 [ 4 0 0 0 0 2 2 16 0 0]
 [ 3 1 0 0 0 7 0 14 0 1]
 [ 6 1 0 0 5 0 0 6 0 3]
 [ 9 0 0 0 0 2 0 9 1 8]]
```

(Seed = 1)

```
[[ 0 0 0 0 0 0 0 0 0 28]
 [ 0 5 0 16 0 1 0 0 0 0]
 [ 0 0 14 0 1 7 0 0 0 4]
 [ 0 1 0 24 0 0 0 0 0 0]
 [ 0 14 0 0 0 3 0 0 0 0]
 [ 0 11 0 0 1 15 0 0 0 0]
 [ 0 0 4 0 0 0 10 0 0 10]
 [ 0 0 8 0 4 0 2 6 0 6]
 [ 0 0 4 1 5 0 1 0 1 9]
 [ 0 0 5 0 0 1 0 0 0 23]]
```

(Seed = 2)

```
[[ 8 0 12 0 0 0 0 0 8 0]
 [ 0 3 0 19 0 0 0 0 0 0]
 [ 0 15 11 0 0 0 0 0 0 0]
 [ 0 3 0 22 0 0 0 0 0 0]
 [ 0 8 5 2 1 0 0 0 0 1]
 [ 0 20 2 1 0 4 0 0 0 0]
 [10 4 4 0 1 0 5 0 0 0]
 [ 2 1 15 0 2 0 4 2 0 0]
 [ 4 3 9 1 0 0 0 0 0 4]
 [ 5 2 18 0 0 1 0 0 3 0]]
```



Part 2

Number Queried:

CAL: 22

Random: 200

