

## Adaboost

Data 1            Training set            Test set

K

5	0.8061767838125665	0.8005677785663591
10	0.8029818956336529	0.7906316536550745
15	0.7981895633652822	0.7806955287437899
20	0.7958821441249556	0.7721788502484032

Data 2            Training set            Test set

K

5	0.8343416971223242	0.8375406916037098
10	0.8336967537852031	0.8363122658313371
15	0.8254046251650747	0.8283274983109146
20	0.8307484413869353	0.835145261347583

Data 3            Training set            Test set

K

5	0.9624402458456636	0.9526842584167425
10	0.9492374231732301	0.9417652411282984
15	0.9531072160254951	0.9490445859872612
20	0.9428636467106761	0.9317561419472248

# Logistic Regression

## Data 1

```
training set
Your score with tanh: 0.7955997161107168
accuracy : 0.8010294639687611
sensitivity/recall : 0.5223184543637575
specificity : 0.9022501814662472
precision/PPV : 0.6599326599326599
false discovery rate : 0.3400673400673401
F1 score : 0.5831164001487542
```

```
test set
Your score with tanh: 0.7955997161107168
accuracy : 0.7955997161107168
sensitivity/recall : 0.47554347826086957
specificity : 0.9087415946205571
precision/PPV : 0.6481481481481481
false discovery rate : 0.35185185185185186
F1 score : 0.54858934169279
```

## Data 2

```
training set
Your score with tanh: 0.8249493274368896
accuracy : 0.8223334664168791
sensitivity/recall : 0.4588700420864686
specificity : 0.9376213592233009
precision/PPV : 0.7
false discovery rate : 0.30000000000000004
F1 score : 0.5543486634311686
```

```
test set
Your score with tanh: 0.8249493274368896
accuracy : 0.8249493274368896
sensitivity/recall : 0.4578783151326053
specificity : 0.9384800965018094
precision/PPV : 0.6971496437054632
false discovery rate : 0.3028503562945368
F1 score : 0.5527306967984933
```

### Data 3

```
accuracy : 0.9107671295242431
sensitivity/recall : 0.0
specificity : 1.0
precision/PPV : nan
false discovery rate : nan
F1 score : nan
test set
```

```
Your score with tanh: 0.8989990900818926
accuracy : 0.8989990900818926
sensitivity/recall : 0.0
specificity : 1.0
precision/PPV : nan
false discovery rate : nan
F1 score : nan
```

## **Instructions**

Comment out line 177-181 for loading dataset 1

Comment out line 188-204 for loading dataset 2

Comment out line 209-217 for loading dataset 3

Line 443 for testing logistic regression without adaboost

Line 591 for adaboost

Datasets need to be in the same folder as the .py file

