W3

Graded

Group

Tagore Kosireddy

Michael Ngala

Feven Tefera
...and 1 more

✓ View or edit group

Total Points

40 / 40 pts

Question 1

Q1

15 / 15 pts

✓ - 0 pts Correct

#### Question 2

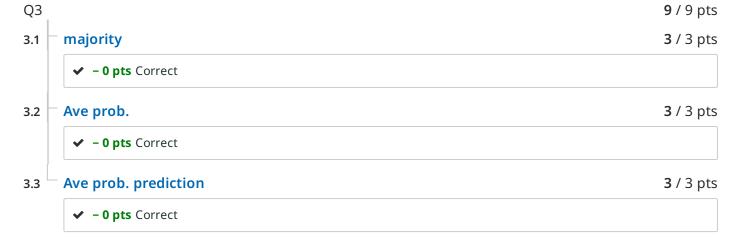
Q2
2.1 Q2(a)
4 / 4 pts

- 0 pts Correct

Q2(b)
4 / 4 pts

- 0 pts Correct

#### Question 3



# Question 4



Group Name	Charlie
Group Member 1	Feven Tefera
Group Member 2	Mihret Kemal
Group Member 3	Michael Ngala
Group Member 4	Tagore Kosireddy

### $\mathbf{Q}\mathbf{1}$

For each figure, select the parameters of the SVM and SVM kernel that was used to create the decision boundary.

Note, for some figures, there may be more than one that are possible.

- I. linear kernel, C=1
- II. linear kernel, C=1000
- III. polynomial kernel d=2, C=1
- IV. polynomial kernel d=2, C=1000
- V. rbf kernel, C=1
- VI. rbf kernel, C=1000

- A. VI
- B. III
- C. I, II
- D. IV
- E. V

# $\mathbf{Q2}$

- (a) Number of random forests we will train  $3*\delta$
- (b) Number of decision trees we will train  $\delta*(\alpha+\beta+\gamma)$

Q3

Majority Vote: Blue

Blue has more number of votes: 6 votes  $(0.55,\,0.6,\,0.6,\,0.65,\,0.7,\,0.75)$ 

Ave. Prob.: 0.45

 $(0.1\,+\,0.15\,+\,0.2\,+\,0.2\,+\,0.55\,+\,0.6\,+\,0.6\,+\,0.65\,+\,0.7\,+\,0.75)/10$ 

Ave. Prob. Prediction: Green

 $\mathbf{Q4}$ 

PC1: D

PC2: F