Week 3 Kahoot

Q1

Logistic regression is a supervised regression model

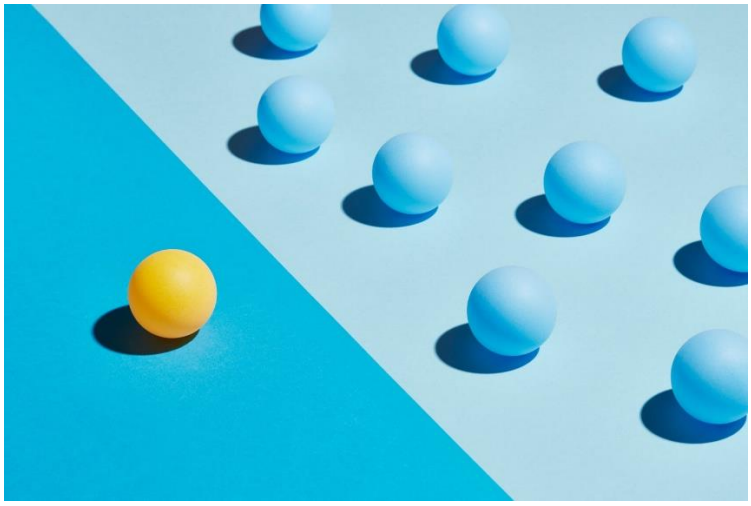
- True
- **False**

Q2

To obtain probability estimates for a new data point using trained logistic regression in sklearn, which method to use?

- transform
- predict
- infer
- **predict_proba**

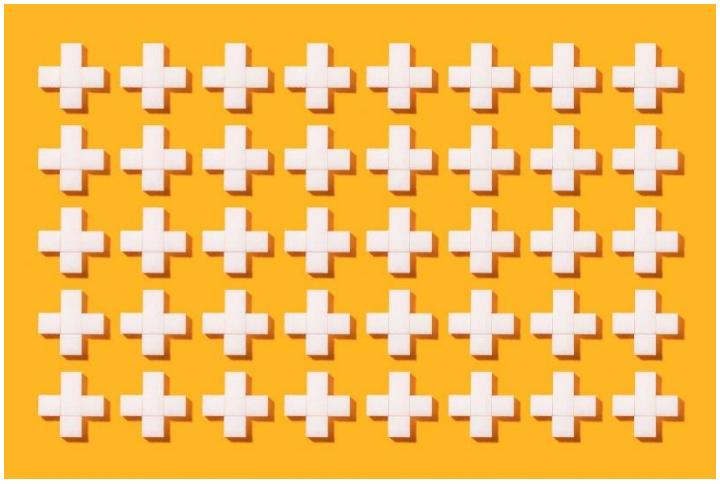
Q3



The predicted probability of belonging to class 1 is highest on the decision boundary of the logistic regression model.

- True
- **False**

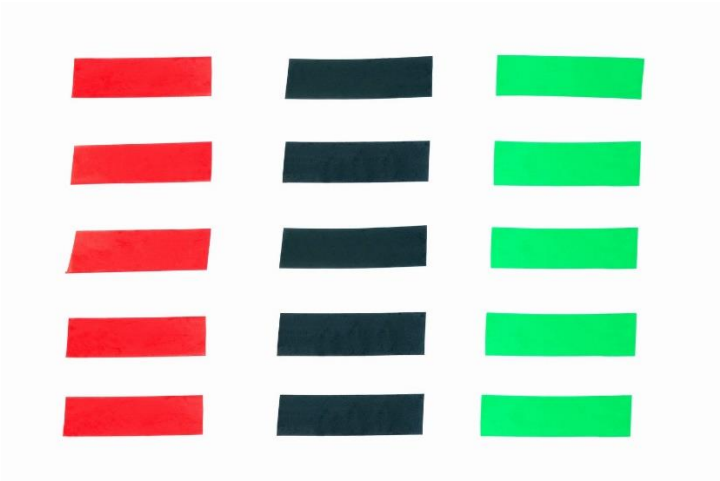
Q4



We have trained a model that for every data point predicts positive class. This model has:

- **Recall = 1**
- Accuracy = 1
- Precision = 1
- AUC ROC = 1

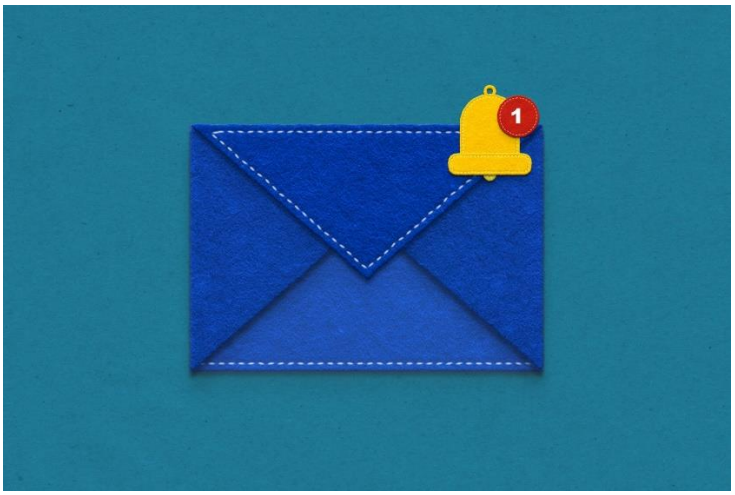
Q5



We have trained a model that for every data point predicts negative class. For a balanced dataset, this model has:

- Recall = 0.5
- Accuracy = 0
- **Recall = 0**
- Precision = 0.5

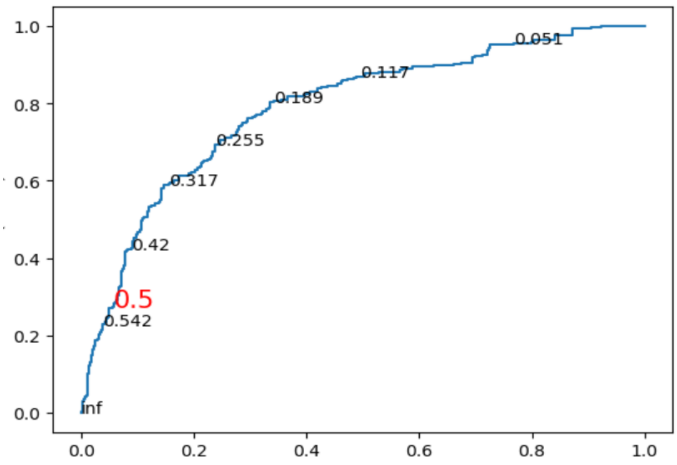
Q6



A model detects too few spam emails. To catch more spam (positive class), we should:

- **decrease the threshold for belonging to class 1**
- increase the threshold for belonging to class 1
- train a new model with only non-spam emails
- eliminate all regularization and train a new model

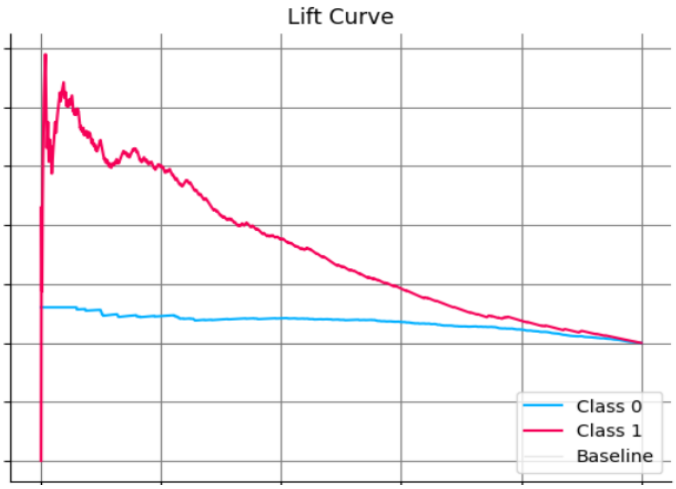
Q7



Below is an ROC curve with labeled thresholds. If we change the threshold from 0.5 to 0.317, we will:

- decrease the TPR
- decrease the FPR
- decrease the recall
- **increase the recall**

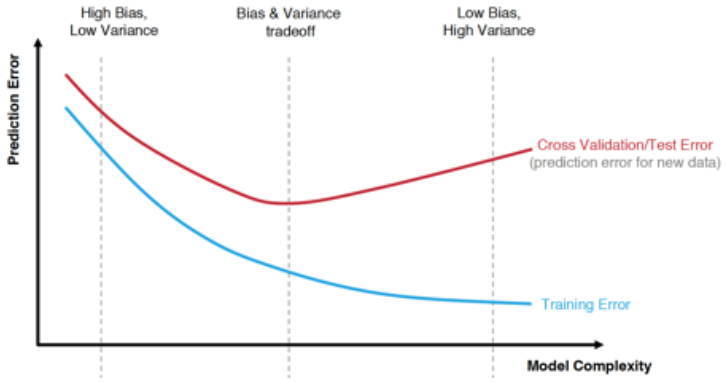
Q8



What is on the x-axis of lift curve?

- True positive rate
- Percentage of datapoints in the dataset, randomly shuffled
- False positive rate
- **Percentage of datapoints in the dataset, ranked by predicted probability**

Q9



To increase model complexity for logistic regression, we should

- increase regularization strength
- decrease the number of features
- **decrease regularization strength**
- decrease the polynomial degree of features

Q10

Regarding notebook 2:

- I went through it and still did not understand anything
- **It took some time, but I could follow most of the things**
- I went through it and understood very little
- I actually did not go through it, there is plenty of time until exam