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SLC Quiz

Type	:	Graded Quiz
Attempts	:	1/1
Questions	:	20
Time	:	40m
Due Date	:	May 23, 11:00 PM
Your Score	:	12/20

Instructions



Attempt History

Attempt #1

May 23, 7:55 AM

Marks: 12



Q No: 1

Correct Answer

For KNN, what should you do if you find noise in the data?

 Increase the value of k

You Selected

 Decrease the value of k We can't do anything None

Q No: 2**Correct Answer**

In the worst-case scenario, the computational complexity for classifying new samples increases linearly with the number of samples in the training data.

 True

You Selected

 False**Q No: 3****Incorrect Answer**

Which values are present on the X-Axis and the Y-Axis of the ROC curve respectively?

 TPR, TNR

You Selected

 TNR, TPR TPR, FPR TNR, FPR**Q No: 4****Correct Answer**

Which of the following is a tree based learner?

 ID3 CART Random Forest All

You Selected

Q No: 5**Incorrect Answer**

Is normalization necessary for the tree based algorithms?

 Yes

You Selected

 No**Q No: 6****Correct Answer**

The Youden's Index is used _____.

 Treat multicollinearity Find the optimal cutoff probability

You Selected

 Increase the specificity Check for the normality of residuals**Q No: 7****Incorrect Answer**

For the KNN algorithm accuracy increases with the larger values of K.

 True

You Selected

 False**Q No: 8****Incorrect Answer**

Which algorithm doesn't use the learning rate as one of its hyperparameters?

- Gradient Descent

- Random Forest
- Decision Tree

 1) and 3) 1) and 2) 2) and 3) All the given option

You Selected

Q No: 9

Correct Answer

Boosting algorithms minimize error in previously predicted values by the last estimator.

 True

You Selected

 False**Q No: 10**

Incorrect Answer

We want models with low bias and low variance. Boosting helps to lower the bias.

 True False Maybe

You Selected

Q No: 11

Incorrect Answer

For regression trees, the attribute with the largest _____ is chosen for the split.

Information Gain

You Selected

 Gini Index Standard Deviation Reduction Entropy**Q No: 12**

Incorrect Answer

Which of the following statements is true?

 Increasing the value of K increases the variance Increasing the value of K decreases the variance

You Selected

 Decreasing the value of K increases the variance None**Q No: 13**

Incorrect Answer

Calculate the sensitivity from the confusion matrix given above.

		Predicted Class	
		Positive	Negative
Actual Class	Positive	150	20
	Negative	10	100

 0.882 0.909 0.937

You Selected

 0.833 None

Q No: 14

Correct Answer

Find McFadden's pseudo R² value.

Logit Regression Results

Dep. Variable:	target	No. Observations:	32561			
Model:	Logit	Df Residuals:	32559			
Method:	MLE	Df Model:	1			
Date:	Tue, 13 Feb 2018	Pseudo R-squ.:				
Time:	21:24:30	Log-Likelihood:	-17101.			
converged:	True	LL-Null:	-17974.			
		LLR p-value:	0.000			
<hr/>						
	coef	std err	z	P> z	[95.0% Conf. Int.]	
const	-2.7440	0.043	-64.211	0.000	-2.828	-2.660
age	0.0395	0.001	40.862	0.000	0.038	0.041

0.051

0.0485

You Selected

0.9514

-0.051

Q No: 15

Correct Answer

Random Forest is used only for classification whereas Gradient Boosting is used only for regression tasks.

True

False

You Selected

Q No: 16

Correct Answer

Consider that we are applying the AdaBoost algorithm on some data. The difference between

the training error and the test error decreases as the number of observations increases.

 True

You Selected

 False**Q No: 17**

Correct Answer

Random Forest can be used for regression tasks but boosting techniques can not be used for regression tasks.

 True False

You Selected

Q No: 18

Correct Answer

What is the probability that the sum of two dice will be greater than or equal to 10, given that the first dice rolled a 5?

 1/6 1/2 1/3

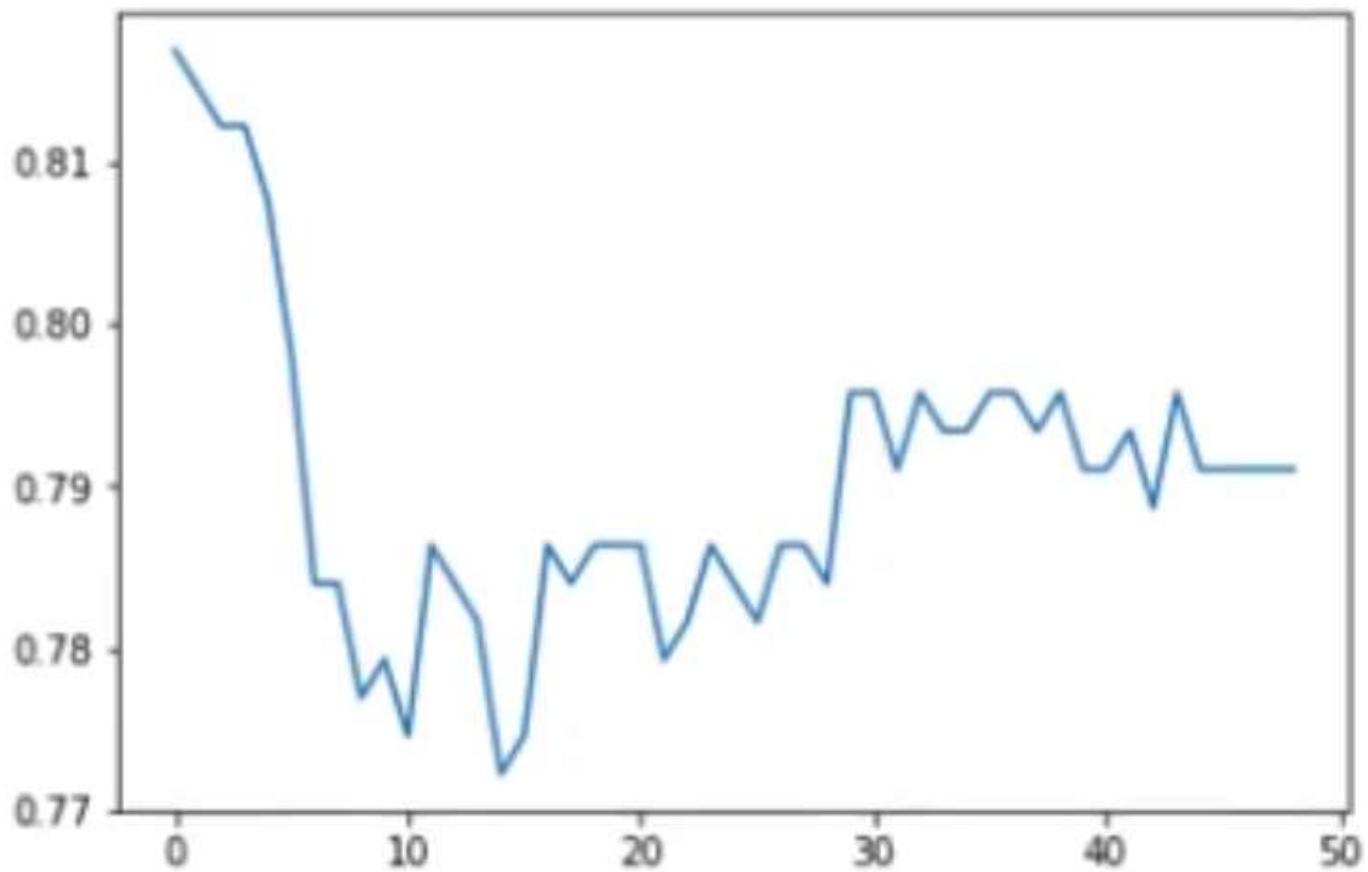
You Selected

 2/36**Q No: 19**

Correct Answer

From the given figure, which can be considered as an optimal/best value of K for KNN?

The plot is between the k value and accuracy.

 2 0 31

You Selected

 13

Q No: 20

Correct Answer

What is true about the hyperparameter “max-depth” for gradient boosting?

1. Increasing the value of max_depth overfits the data.
2. Increasing the value of max_depth underfits the data

1)

You Selected

 2) Both 1) and 2) “Max-depth” is the hyperparameter of random forest only. Gradient Boosting has nothing to do with max-depth[!\[\]\(f80254b170d0ecdc443847276e625120_img.jpg\) Previous](#)

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