

DM-Spring-2020-Q6-Grade

19 Questions

- 1. KNN is
- 12/13 A data-driven method
- 1/13 **B** model-driven method
- 0/13 C I do not know
 - 2. The dependent variable of the classification is
- 12/13 A categorical
- 1/13 B numeric
- 0/13 C I do not know
 - 3. KNN can be used for regression
- 13/13 A Yes
- **0/13 B** No
- 0/13 C I do not know
 - 4. In the case of KNN classification we use
- 2/13 A average of outcomes
- 10/13 B majority voting scheme
- 1/13 C I do not know
 - 5. Which of these errors will increase constantly by increasing k?
- 7/13 A train error
- 5/13 **B** test error
- 1/13 **C** both
- 0/13 D I do not know

6	T L	
12/13	A	is function can be used to perform KNN classificationin R knn()
		k_nn()
		knnreg()
		knearneib()
1/13	E	I do not know
_		
		th the increase of k, the decision boundary will be
		simplified
		more complex
		I do not know
0/13	D	unchanged
8.	KN	IN algorithm is sensitive to outliers
12/13	A	True
1/13	В	False
0/13	C	I do not know
9.	KN	IN
12/13	A	is a supervised learning algorithm.
1/13	В	is an unsupervised learning algorithm.
0/13	C	I do not know
10.	. In	the case of small k we have
9/13	A	overfitting
3/13	В	underfitting
1/13	C	it depends on the situation
0/13	D	I do not know

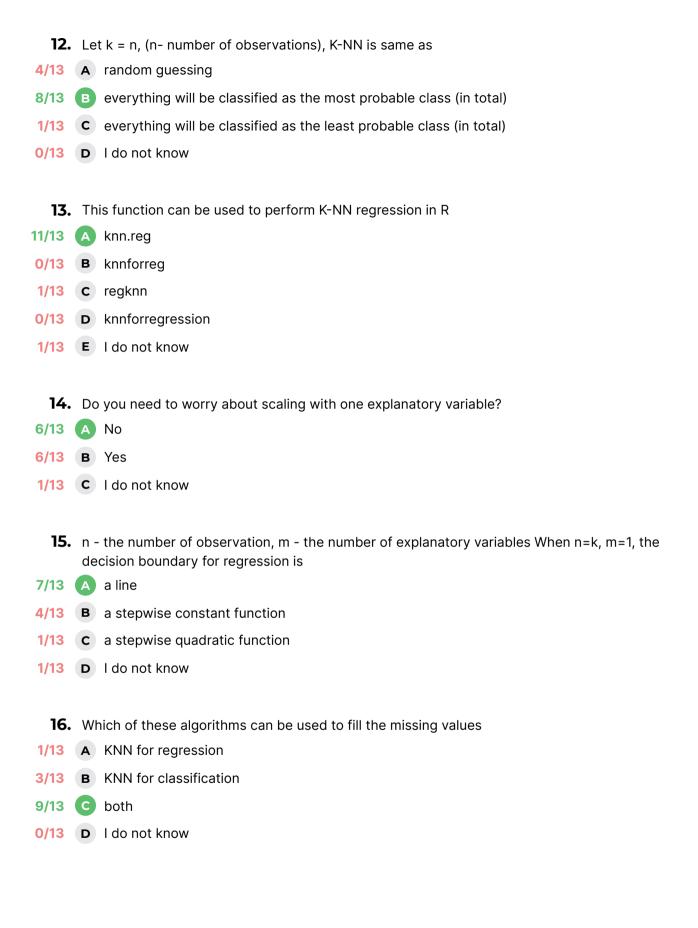
11. Why do we need scaling in KNN?

6/13 c to have "equal" weights for variables

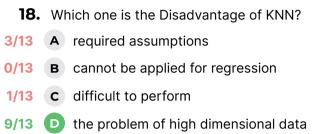
3/13 A to avoid overfitting

2/13 B to avoid underfitting

2/13 D I do not know



17.	Wł	nich one is better: KNN regression or Linear regression?
2/13	A	\ensuremath{KNN} outperform LR if the parametric form that has been selected is close to the true linear form
11/13	В	LR outperform KNN if the parametric form that has been selected is close to the true linear form
0/13	C	KNN will always outperform the LR



19. The best k for train set equals to7/13 A 16/13 B 2

0/13 C 0

0/13 D I do not know

0/13 E I do not know

0/13 D I do not know