DM-Quiz-2020-Q6

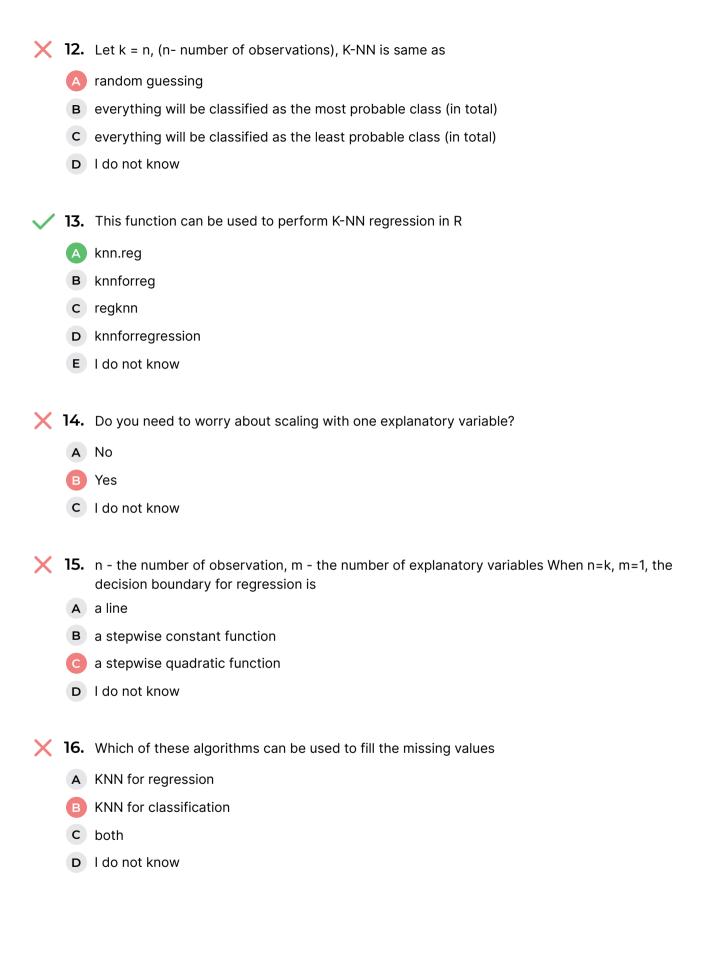# 36.84% (7/19)

1. KNN is

- A data-driven method
- B model-driven method
- C I do not know

2. The dependent variable of the classification is

- A categorical
- B numeric
- C I do not know

3. KNN can be used for regression

- A Yes
- B No
- C I do not know

4. In the case of KNN classification we use

- A average of outcomes
- B majority voting scheme
- C I do not know

5. Which of these errors will increase constantly by increasing k?

- A train error
- B test error
- C both
- D I do not know

✗ 6. This function can be used to perform KNN classificationin R

A knn()

B k_nn()

C knnreg()

D knearneib()

E I do not know

✗ 7. With the increase of k, the decision boundary will be

A simplified

B more complex

C I do not know

D unchanged

✓ 8. KNN algorithm is sensitive to outliers

A True

B False

C I do not know

✓ 9. KNN

A is a supervised learning algorithm.

B is an unsupervised learning algorithm.

C I do not know

✗ 10. In the case of small k we have

A overfitting

B underfitting

C it depends on the situation

D I do not know

✗ 11. Why do we need scaling in KNN?

A to avoid overfitting

B to avoid underfitting

C to have "equal" weights for variables

D I do not know

12. Let k = n, (n- number of observations), K-NN is same as

A random guessing

B everything will be classified as the most probable class (in total)

C everything will be classified as the least probable class (in total)

D I do not know

13. This function can be used to perform K-NN regression in R

A knn.reg

B knnforreg

C regknn

D knnforregression

E I do not know

14. Do you need to worry about scaling with one explanatory variable?

A No

B Yes

C I do not know

15. n - the number of observation, m - the number of explanatory variables When n=k, m=1, the decision boundary for regression is

A a line

B a stepwise constant function

C a stepwise quadratic function

D I do not know

16. Which of these algorithms can be used to fill the missing values

A KNN for regression

B KNN for classification

C both

D I do not know

17. Which one is better: KNN regression or Linear regression?

A KNN outperform LR if the parametric form that has been selected is close to the true form of f

B LR outperform KNN if the parametric form that has been selected is close to the true form of f

C KNN will always outperform the LR

D I do not know

18. Which one is the Disadvantage of KNN?

A required assumptions

B cannot be applied for regression

C difficult to perform

D the problem of high dimensional data

E I do not know

19. The best k for train set equals to

A 1

B 2

C 0

D I do not know