







Answer:

Logistic Regression typically solves classification based problems though the name itself suggests Logistic Regression it solves only classification problems that are binary in nature which is binary classification with 2 or more than 2 outputs.













Answer : D





Answer :

False Logistic and is not only used for binary classification problems but is used for multi classification with more than 2 outputs .





Answer :

The cost function used in Logistic Regression is log loss function or binary cross entropy function .















Answer : B





Answer :

L1 regularization (Lasso) adds the absolute value of coefficients as penalty, leading to sparse solutions and feature selection.

L2 regularization (Ridge) adds the squared value of coefficients as penalty, shrinking coefficients but rarely eliminating them.















Answer : B





Answer :

The output of Logistic Regression model before applying sigmoid function is linear combination of model input features which is logits







Answer :

Logistic Regression predicts a probability for a categorical output, while Linear Regression predicts a continuous value for a numeric output.













Answer : B















Answer : A





Answer : False KNN is non parametric algorithm.













Answer : B





Answer :

A small K can lead to overfitting & high variance, while a large K can lead to underfitting & high bias. The choice of K affects the smoothness of the decision boundary.













Answer : C





Answer :

KNN finds the ‘K’ nearest neighbors to the new data point using a distance metric, then assigns the most common class among those neighbors for classification or averages their values for regression.













Answer : C





Answer :

**Pros**:

• KNN is simple

•Makes no assumptions about data distribution

•Can model complex boundaries.

**Cons:**

•KNN is computationally expensive at prediction

•Sensitive to irrelevant features and the scale of data

•Does not provide feature importance, unlike Logistic Regression.





Answer :

If K=1, the model is highly sensitive to noise and outliers, leading to overfitting.















Answer : A



|  |
| --- |
|  |