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Que 1-What is Ridge Regression, and how does it differ from ordinary least
squares regression?
Ans 1- Ridge Regression is a type of Regression which is generally used to reduce the
overfitting.

Linear Regression establishes a relationship between dependent variable (Y)
and one or more independent variables (X) using a best fit straight line
(also known as regression line). Ridge Regression is a technique used when the
data suffers from multicollinearity ( independent variables are highly
correlated).

Que 2-What are the assumptions of Ridge Regression?
Ans 2-Assumptions in the Ridge Regression are that there is some error assumed.

Que 3-How do you select the value of the tuning parameter (lambda) in Ridge
Regression?
Ans 3-The value of lambda will be chosen by cross-validation. The plot shows
cross-validated mean square error.
Que 4. Can Ridge Regression be used for feature selection? If
decreases.

Que 4- Can Ridge Regression be used for feature selection? If yes, how?
Ans 4 We can use ridge regression for feature selection while fitting the model.
we are going to use logistic regression for model fitting and push the parameter
penalty as L2 which basically means the penalty we use in ridge regression.

Que 5-How does the Ridge Regression model perform in the presence of multicollinearity?
Ans 5-Multicollinearity happens when predictor variables exhibit a correlation
among themselves. Ridge regression aims at reducing the standard error by
adding some bias in the estimates of the regression. The reduction of the
standard error in regression estimates significantly increases the reliability
of the estimates.

Que 6-Can Ridge Regression handle both categorical and continuous independent
variables?
Ans 6-NO,
Ridge regression is used for regression purpose only as it needs the dependent
variable.

Que 7-Can Ridge Regression be used for time-series data analysis? If yes, how?
Ans 7-The ridge regression technique can be used to predict time-series.

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