

ML \ Linear Regression

3 plays · 27 players

A private kahoot

Questions (25)

1	-	()	u	17

Which method is used to evaluate the performance of a linear regression
model?

10 sec



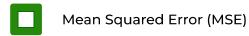








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2 - Quiz

What is the difference between supervised and unsupervised learning?

20 sec



SL requires human supervision, unsupervised learning does not

	1	



SL uses labeled data, unsupervised learning uses unlabeled data





Supervised learning predicts future events, unsupervised learning does not





There is no difference

X

w	hat is linear regression primarily used for?	10 sec
	Classification	×
•	Dimensionality reduction	×
	Regression	✓
	Clustering	×
	· Quiz	
	hat technique is commonly used to find the best-fit line in linear gression?	10 sec
	Gradient Descent	✓
•	Random Forest	×
	K-means clustering	×
	Support Vector Machines (SVM)	×
5 -	Quiz	
W	hat is the purpose of the intercept term in linear regression?	10 sec
	It defines the slope of the line	×
•	It minimizes errors	×
	It defines the starting point of the line	✓
	It maximizes accuracy	×

Which term represents the predicted ou	utput in linear regression?
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10 sec



Slope





Predicted value





Residual





Intercept



7 - Quiz

What is the name of the line that best fits the data in linear regression?

10 sec



Best line





Optimal line





Regression Model





Linear line



8 - Quiz

What is the formula for the equation of a simple linear regression line?

10 sec



y = mx1 + mx2 + c





 $y = ax^2 + bx + c$





y = mx^2 + c





y = ax + b



W	Quiz hat does 'a' represent in the equation(y=ax + b) of a simple linear gression line?	10 sec
	Slope	✓
•	Intercept	×
	Coefficient	×
	Residual	×
Ja	- True or false va is the commonly used programming language for implementing achine learning algorithms	10 sec
•	True	×
	False	✓
	· Quiz hat is the primary goal of machine learning?	10 sec
	Automate human tasks	×
•	Detect pattern in data	✓
	Improve internet speed	×
	Create intelligent robots	×
	- Quiz hat is the objective of linear regression?	10 sec
	Maximize accuracy	×
•	Maximize precision	×
	Minimize errors	✓
	Minimize features	×

What does the term "features" refer to in the context of machine learning?		20 sec
	The main function of a machine learning model	×
•	Individual columns in the dataset	✓
	The accuracy of a model's predictions	X
	The number of data points in a dataset	×
	·Quiz	
ln s	simple linear regression, how many independent variables are there?	10 sec
	Three	×
•	Two	×
	One	✓
	None	×
15 -	Quiz	
In I	inear regression, what does the term 'Ŷ' represent?	10 sec
	Predicted value	✓
•	True value	×
	Intercept	×
	Residual	×

W	hat is the purpose of residual analysis in linear regression?	10 sec
	To find outliers	×
•	To assess the distribution of errors	✓
	To evaluate multicollinearity	×
	To estimate coefficients	×
	- Quiz	
W	hat is the goal when minimizing residuals in linear regression?	20 sec
	To make all residuals positive	×
•	To make all residuals zero	×
	To make the sum of squared residuals as small as possible	✓
	To maximize the number of observations	×
18	- Quiz	
W	hat is the purpose of feature scaling in linear regression?	20 sec
	To increase the interpretability of the model	×
•	To decrease the computational cost of training	×
	To reduce the number of features	×
	To standardize the range of independent variables	✓

19 - Quiz Which type of machine learning algorithm is used for making predictions 20 sec based on labeled data? X Unsupervised learning Reinforcement learning Supervised learning Semi-supervised learning 20 - True or false The purpose of the coefficient in linear regression is to define the slope of 10 sec the line True **False** 21 - Quiz What is multicollinearity in linear regression? 20 sec When there are multiple dependent variables When there are multiple independent variables that are highly correlated When there are missing values in the dataset When there are outliers in the dataset 22 - Quiz What does the term 'residual' represent in linear regression? 20 sec The difference between observed and predicted values The slope of the regression line

The coefficient of determination

The ratio of features to observations

In multiple linear regression, how many independent va	ariab	les are there?
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10 sec



One





Two



More than two



None



24 - Quiz

What is the formula for calculating Mean Squared Error (MSE) in linear regression?

20 sec



 $MSE = \sum (Y - \hat{Y}) \wedge 2$





 $MSE = \sum (Y - \hat{Y}) / n$



0

 $MSE = \sum (Y - \hat{Y})^2 / n$





 $MSE = \sum (Y - \hat{Y})$



25 - Quiz

How to import Scaler?

10 sec



from sklearn.preprocessing import Scaler





import preprocessing





import preprocessing.scaler





from sklearn.preprocessing import StandardScaler

Resource credits ^