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Score: 100%

No. of questions: 9

Correct answer: 9

Incorrect answer: 0

Show incorrect attempt only

Which of the following is true about 'residuals'?

A Lower is better



B Higher is better

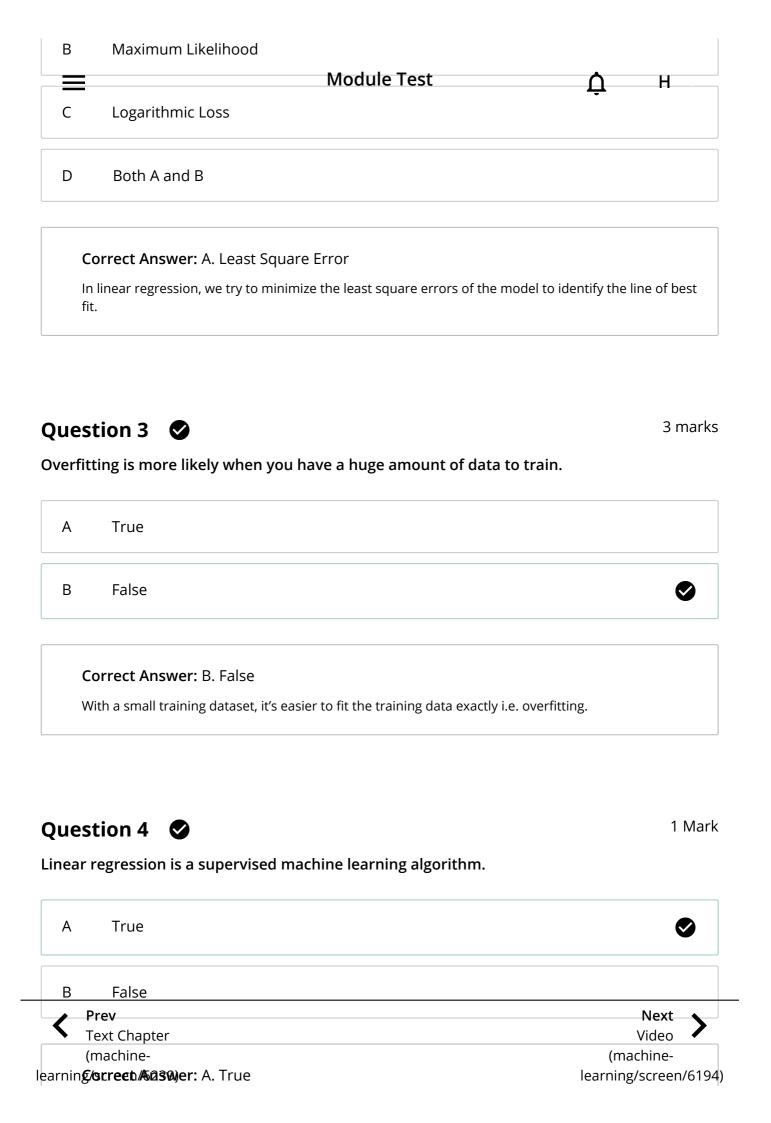
C Depends on the situation

Correct Answer: A. Lower is better

Residuals refer to the error values of the model. Therefore, lower residuals are desired.

Which of the following methods is used to find the best fit line for data in linear regression?





Yes, linear regression is a supervised learning algorithm because it uses true labels for training.

Supervised learning algorithm should have an input variable (x) and an output variable (Y) for each

mathematical models.

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Question 5 2 Marks

Which of the following statements is true about outliers in linear regression?

	Α	Linear regression is sensitive to outliers	•
_			
	В	Linear regression is not sensitive to outliers	
	С	None of the above	

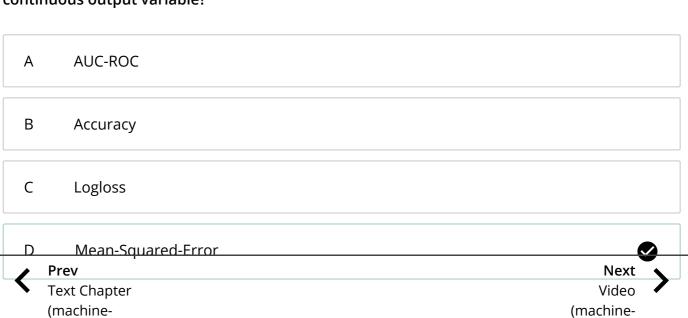
Correct Answer: A. Linear regression is sensitive to outliers

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The slope of the regression line will change due to outliers in most of the cases. So, linear regression is sensitive to outliers.

Question 6 amarks

Which of the following evaluation metrics can be used to evaluate a model while modeling a continuous output variable?



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_Correct Answer: D. Mean-Squared-Error Module Test



Since linear regression gives output as continuous values, so in such cases, we use mean squared error metric to evaluate the model performance. Remaining options are used in case of a classification problem.

Question 7



1 Mark

What is the slope of the line y = 2x+5?

Α 2



- 5 В
- C 2/5
- 5/2 D

Correct Answer: A. 2

Slope intercept form of the equation of a line is given by y=mx+c where 'm' refers to the slope. In our case, the slope of a line is 2.

Question 8

2 Marks

Consider the following regression line:

 $Y = \beta x + b$

What do the parameters β and b signify?

Intercept and slope respectively Α



Slope and intercept respectively Text Chapter

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D None of the above

Correct Answer: B. Slope and intercept respectively

Slope intercept form of the equation of a line is given by y=mx+c; Where 'm' refers to the slope and 'c' refers to intercept. In our case, ' β ' refers to the slope and 'b' refers to intercept.

Question 9

3 marks

Which of the following equations are examples of linear relationships?

A
$$Y = mX + C$$

B
$$Y = X$$

C
$$Y = X^2$$

D
$$Y = X^3$$

E Both A and B



Correct Answer: E. Both A and B

Any equation whose degree is less than or equal to 1 is called a linear equation. In our case, y=mx+c and y=x have degree 1. Hence, these are examples of linear relationships.