

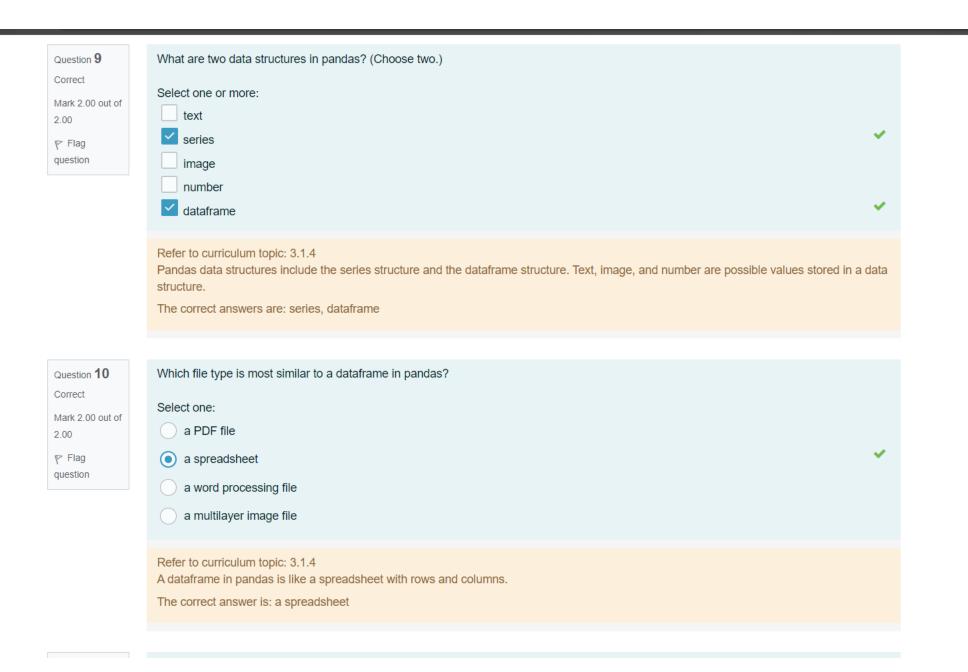
Question 3 What relationship is an example of causation? Correct Select one: Mark 2.00 out of a relationship between sensors and actuators in IoT 2.00 ▼ Flag a relationship in which two things change at a similar rate question a relationship between a computer operating system and one or more programming languages a relationship when a change in one thing directly results in something else changing Refer to curriculum topic: 3.1.5 Causation describes a relationship in which one thing changes, or is created, directly because of something else. It is not the relationship of the rate of change. Sensors and actuators in IoT are not directly related to each other. A controller might receive the signal from a sensor, make a decision, and instruct an actuator to act if necessary. Also, operating systems and programming languages are not dependent on each other. An operating system can be made by different programming languages. The correct answer is: a relationship when a change in one thing directly results in something else changing Question 4 Which term is used to describe the right and left ends of a distribution graph? Correct Select one: Mark 2.00 out of tail 2.00 ▼ Flag end question peak axis Refer to curriculum topic: 3.1.3 On a distribution curve, the right and left ends of the graphed curve are known as the tails. The correct answer is: tail

Question 5 Which term is used to describe the difference between the highest and the lowest values for a variable? Correct Select one: Mark 2.00 out of range 2.00 mode ▼ Flag question variance standard deviation skew Refer to curriculum topic: 3.1.3 The range is the difference between the highest and lowest values for a variable. By knowing the range, someone looking at the data can have a basic idea if the data is making sense. The correct answer is: range Match the variable with the type of value. Question 6 Correct nominal eye color Mark 2.00 out of 2.00 student class rank \$ ordinal ▼ Flag continuous sales volume question number of users 💠 🗸 discrete Refer to curriculum topic: 3.1.1 The correct answer is: nominal \rightarrow eye color, ordinal \rightarrow student class rank, continuous \rightarrow sales volume, discrete \rightarrow number of users

Question 7

Which statement is an accurate description of discrete variables?

Question 7 Which statement is an accurate description of discrete variables? Incorrect Select one: Mark 0.00 out of Discrete variables are qualitative and consist of two or more categories in which order matters. 2.00 × They are quantitative with a continuous range of values. ▼ Flag question They are quantitative with a finite set of values. They are qualitative and consist of two or more categories of values in which order does not matter. Refer to curriculum topic: 3.1.1 Variables are either categorical or numeric. Numerical variables are qualitative and are either continuous or discrete. Discrete variables are those from a finite set of values such as the number of users on the network. The correct answer is: They are quantitative with a finite set of values. Question 8 What category of variables includes nominal or ordinal variables? Correct Select one: Mark 2.00 out of numerical 2.00 categorical ▼ Flag question ratio interval Refer to curriculum topic: 3.1.1 Variables are classified as either categorical or numerical. Categorical variables include nominal and ordinal variables. The correct answer is: categorical



Question 11 Correct	In a graphical reppresentation of the distribution for a discrete variable, what does the X and Y axis reppresent? (Choose two.) Select one or more:
Mark 2.00 out of 2.00	skew
Flag	variable •
question	✓ probability
	range standard deviation
	Refer to curriculum topic: 3.1.3 A distribution can be graphed in two dimensions using two characteristics: the variable and the probability. Typically the variable is plotted on the x-axis and the probability on the y-axis.
	The correct answers are: variable, probability
Question 12 Correct	What is a purpose of using the head Linux command?
Mark 2.00 out of	Select one:
2.00	to determine the size of the file
Flag question	to display the permissions on the file
question	to verify that the file is available and preview the first few lines
	to determine whether the file contains enough code to be executable
	Refer to curriculum topic: 3.1.4 The head Linux command reads the first few lines of a file and writes them to the standard output (by default, the display screen). This command is useful to verify the existence and the content of a file before it is imported into pandas.
	The correct answer is: to verify that the file is available and preview the first few lines

-

A data analyst studies two variables over a period. Data set A is (100, 90, 81, 73) and data set B is (3500, 3150, 2835, 2552). The Pearson r Question 13 value between these two variables is 0.99. Which statement describes the correlation between them? Correct Mark 2.00 out of Select one: 2.00 It indicates no relationship. ▼ Flag It is a weak negative correlation. question It is a strong positive correlation. It is a strong negative correlation. Refer to curriculum topic: 3.1.5 The Pearson r is a quantity to indicate the correlation between two variables. It is expressed as a value between -1 and 1. Positive values express a positive relationship between the changes in two variables. Negative values express an inverse relationship. The magnitude of either the positive or negative values indicates the degree of correlation. In other words the closer the value is to 1 or -1, the stronger the relationship. 0 indicates no relationship. The correct answer is: It is a strong positive correlation. A data analyst performs a correlation analysis between two quantities. The result of the analysis is an r value of 0. What does this mean? Question 14 Correct Select one: Mark 2.00 out of The analysis failed. 2.00 The two variables have no relationship. ▼ Flag question Neither variables changed during the period. When one variable increases its value, the other variable reduces its value. Refer to curriculum topic: 3.1.5 The commonly used correlation coefficient, Pearson r, (or r value), is a quantity that is expressed as a value between -1 and 1. Positive values indicate a positive relationship between the changes in two quantities. Negative values indicate an inverse relationship. The magnitude of either the positive or negative values indicates the degree of correlation. The closer the value is to 1 or -1, the stronger the relationship. 0

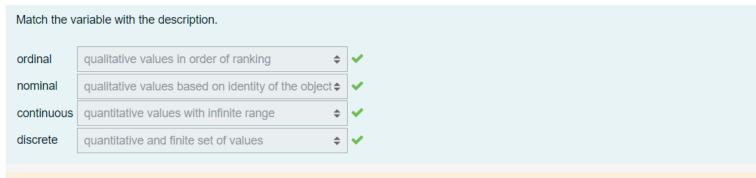
Question 15
Correct
Mark 2.00 out of 2.00
Flag
question

What is a measurement of central tendency that is also known as the average?		
Select one: mode mean	•	
median Person r		
Refer to curriculum topic: 3.1.3 There are three common measures of central tendency: mean, median, and mode. Each expresses the values that a variable has that is closest to the central distribution of a data set. The mean is also known as the average, which is the sum of all data divided by the number of values in the data set. The correct answer is: mean		

Question 16
Correct
Mark 2.00 out of 2.00

Figs.

question



Refer to curriculum topic: 3.1.1

The correct answer is: ordinal \rightarrow qualitative values in order of ranking, nominal \rightarrow qualitative values based on identity of the object, continuous \rightarrow quantitative values with infinite range, discrete \rightarrow quantitative and finite set of values