

Unit 4 - Week 3: Descriptive Analytics

Course outline
How to access the portal?
Week 1: Introduction to Learning Analytics
Week 2: Data Collection
Week 3: Descriptive Analytics
<ul style="list-style-type: none"> Lecture 10 : Descriptive Analytics Lecture 11 : Data Visualization Lecture 12 : YouTube Analytics Dashboard Lecture 13 : MOOCs Analytics Dashboard Lecture 14 : Predictive Analytics
<ul style="list-style-type: none"> Week 3: Learning by Doing (LbD) Learning Experience Interaction (Lxi) 3 Learning Extension Trajectories (LxT) 3
<input type="radio"/> Quiz : Assimilation Quiz 3 <input type="radio"/> Quiz : Assignment 3 <input type="radio"/> Weekly Feedback
Week 4
Live Sessions
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Assignment 3

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-08-21, 23:59 IST.

1) Which of the following research questions **CANNOT** be answered just by using a data visualisation? 1 point

- What is the attendance in the class for the last 30 working days?
- What is the time spent on each resource page in a learning environment?
- What will be the average score of the class in the next test?
- What feedback should the learning environment give for the next question?

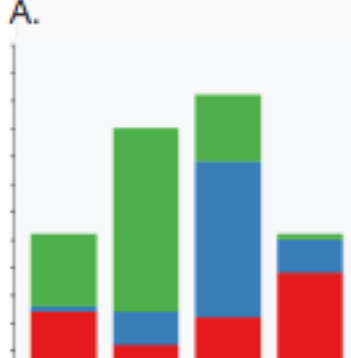
No, the answer is incorrect.
Score: 0

Accepted Answers:
What will be the average score of the class in the next test?
What feedback should the learning environment give for the next question?

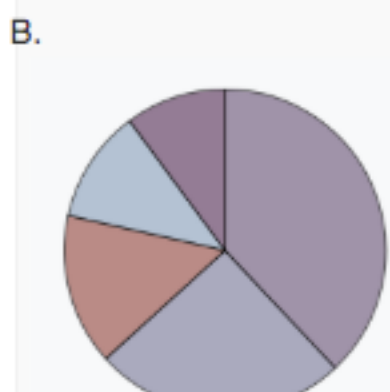
2) Consider the following research question - What is the percentage of low, medium and high performers in first year engineering exam results in colleges across city X? 1 point

Which of the following visualisations can be used to answer the research question?

A.



B.

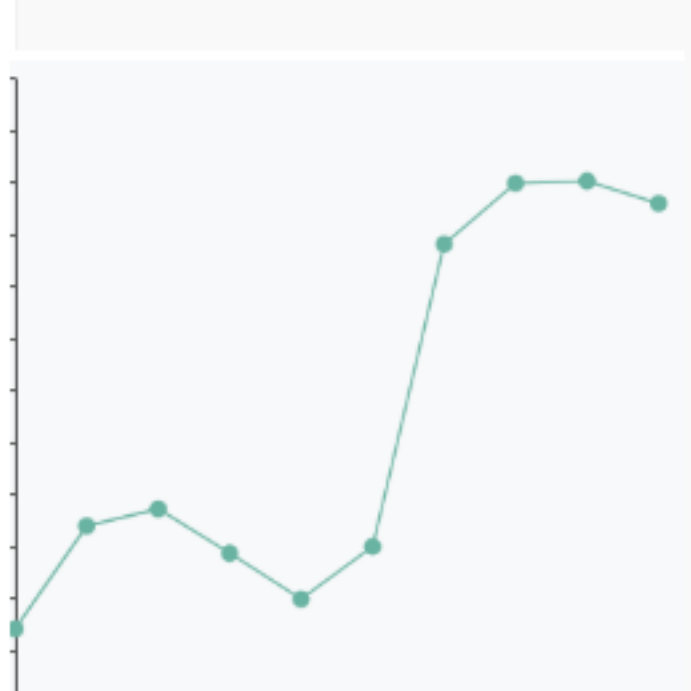


- A
- B
- Both A and B
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
A

3) Consider the visualisation given below 1 point



Which of the following research questions can be answered using the visualization?

- What is the time that a learner spends on each video in an NPTEL course 'X'?
- How many students will score above 90% in the upcoming final term exam?
- How many hours does a learner interact with the learning environment over a week?
- What is the effect of using videos in the classroom on students' score in the midterm?

No, the answer is incorrect.
Score: 0

Accepted Answers:
What is the time that a learner spends on each video in an NPTEL course 'X'?
How many hours does a learner interact with the learning environment over a week?

4) Which of the following statements are TRUE of visualisations based on research? 1 point

- 3D charts are always better than 2D charts
- Bar charts are always better than pie-charts
- The choice of visualization depends on the research question you want to answer
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
The choice of visualization depends on the research question you want to answer

5) You are given the following data from a study conducted with users interacting with a learning environment 1 point

<student_id>,<page_id>,<activity_id>,<time_spent_on_page>

Given this data, what research questions can you answer? Check all that apply.

- What are different ways in which learners navigate through activities in the learning environment?
- In which activity do learners spend the maximum time?
- Which activities are difficult for learners to understand?
- Which features of the learning environment do learners use the most?

No, the answer is incorrect.
Score: 0

Accepted Answers:
What are different ways in which learners navigate through activities in the learning environment?
In which activity do learners spend the maximum time?

6) Which of the following question is a type of Predictive Analytics? 1 point

- What is the average age of learners in the class?
- What type of videos does a particular learner like to watch?
- What is the relation between learners age and their marks in an NPTEL course?
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
What type of videos does a particular learner like to watch?

7) You have a TELE for Maths which you intend to use in your class. Which of the below historical data is a better option to create a predictive model for the Math learning environment? 1 point

- Data you collected from a similar learning environment for Chemistry from the previous year in your class
- Data collected from the Math learning environment by teachers in various schools in US
- Data you collected using same TELE from the previous year students in your class
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Data you collected using same TELE from the previous year students in your class

8) In a class, students are using a learning environment to learn algebra. The teacher has a dashboard available where she can see the progress of each student. How can the dashboard help the teacher? 1 point

- Identify the average time the class takes to complete a task
- Identify how many students fail to complete the task
- Identify which students are taking a long time and help them
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

9) You have collected an online survey data of 400 students in your university. Before analyzing the data, what are important steps that you should take after collecting the data? 1 point

- Decide which questions you want to answer from the data
- Clean up missed values
- Delete outliers in the data
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Clean up missed values
Delete outliers in the data

10) Consider the following chart obtained from the YouTube analytics dashboard 1 point



What type of questions CANNOT be answered by looking at this visualization?

- What is the average views in March, April, May?
- Which month has the maximum number of views?
- What time during the day do viewers watch videos the most?
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
What time during the day do viewers watch videos the most?