

Student Learning Case Study

Introduction:

This dataset contains students data related to the courses they took and their performance. Solve the 15 SQL problems using this dataset.

Problems:

- 1. Identify all the undergraduate students and display their id, gender and course name.
- 2. Fetch details of female students who spent over 300 mins on videos and have high possibility of dropping out.
- 3. Identify students who have either taken Machine Learning or Data Science course and have at least attempted couple of quiz or have scored over 60 in quiz. Sort data based on least forum participation
- 4. How many students prefer learning through visuals
- 5. What is the minimum and maximum exam score by students with the highest assignment completion rate?
- 6. What is the average age of all Postgraduate or Undergraduate female students who took Cybersecurity course and either had High engagement level or

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- preferred learning through writing or actively participated in at-least 20 forums, return whole number.
- 7. Identify all the male postgraduate student or female undergraduate student with final score over 90. Output should contains 2 columns, 1 with the student id and second column should indicate male postgraduate student as "Master degree" and female undergraduate student as "Bachelor degree"
- 8. What is the average time spent on watching videos based on education level? Consider only those students whose age is a even number. Round the value to a single decimal point.
- 9. Identify the most popular male and female student among teachers. Popularity is based on students scoring the hight exam score and highest assignment_completion_rate.
- 10. How many male, female and other students have never participated in a forum with bare minimun quiz attempts and have low engagement level. Result should be 3 columns, 1 each for each gender.
- 11. How many students have taken python, machine learning and data science course?
- 12. Identify the courses that are taken by more than 2000 students.
- 13. What is the preferred course and learning style of students over 40 yrs of age.
- 14. Provide a summary of all the courses. How many students have taken each of them but segregate them based on gender.
- 15. Identify the most popular courses, between the age group of 15-25, 26-40 and >40. Course popularity is based on how many students have taken it. Output should be 3 columns specific to each age group.