

Q1

1/1 point (ungraded)

Consider a materialized view on tables Faculty(name,homeDept) and Teaches(prof,course,dept): create materialized view V as select name from Faculty where name not in (select prof from Teaches where dept = homeDept) Which of the following modifications can NOT cause a change to V?

- ☐ insertion into Teaches
- ☐ deletion from Teaches
- ☐ insertion into Faculty
- ☒ update to Teaches.course

Explanation

V contains faculty who do not teach a course in their home department. Without additional constraints, insertions or deletions on either table can change the contents of V. Faculty.course isn't referenced in the view definition so modifications to course cannot change V.

Submit

You have used 1 of 4 attempts

Answers are displayed within the problem

Q2

1/1 point (ungraded)

Consider a materialized view on table Item(category,price): create view V as select category from Item group by category having min(price) < 25 Which of the following modifications can NOT cause tuples to be deleted from V?

- ☐ deletion from Item
- ☐ update to Item.category

☐ update to Item.price that increases value

☒ update to Item.price that decreases value

Explanation

V contains every category whose lowest-priced item costs less than 25. Decreasing an item's price can add a category to V (i.e., cause an insertion into V), but decreasing a price cannot cause an existing category in V to no longer satisfy the condition (i.e., a deletion from V). All other modifications can cause a deletion.