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SQL 2 In-class Exercise

1. Use the INTERSECT operator for the following question.

Find the showIDs of shows where the symphony performed songs by Mozart and Beethoven.

SELECT showID

FROM SongsPerformed

WHERE composer = "Mozart"

INTERSECT

SELECT showID

FROM SongPerformed

WHERE composer = "Beethoven"

2. Write a query to solve question 1 but this time, do not use the INTERSECT query. If this is not possible, explain why.

SELECT S1.showID

FROM SongsPerformed S1, SongsPerformed S2

WHERE S1.composer = "Mozart" AND S2.composer = "Beethoven" AND S1.showID =

s2.showID

3. Write a query to solve question 1 with the EXISTS/NOT EXISTS operator. If this is not possible, explain why.

SELECT S1.showID

FROM SongsPerformed S1

WHERE S1.composer = "Mozart" AND EXISTS (SELECT *

FROM SongsPerformed S2

WHERE S2.composer = "Beethoven" AND S1.showID =

S2.showID)

4. Write a query to solve question 1 with the IN/NOT IN operator. If this is not possible, explain why.

SELECT showID

FROM SongsPerformed S1

WHERE S1.composer = "Mozart" AND IN (SELECT S2.showID

FROM SongsPerformed S2

WHERE S2.composer = "Beethoven")