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”)