

Instructions



How do you invigorate yourself when you feel tired ? What cheers you up ?

0 responses

Today's agenda

- Total Recall
- Database normalization
- Isolation
- Transaction
- Query
- Quiz
- Questions

Total Recall

What do you remember from the last session?

5 responses

jpa

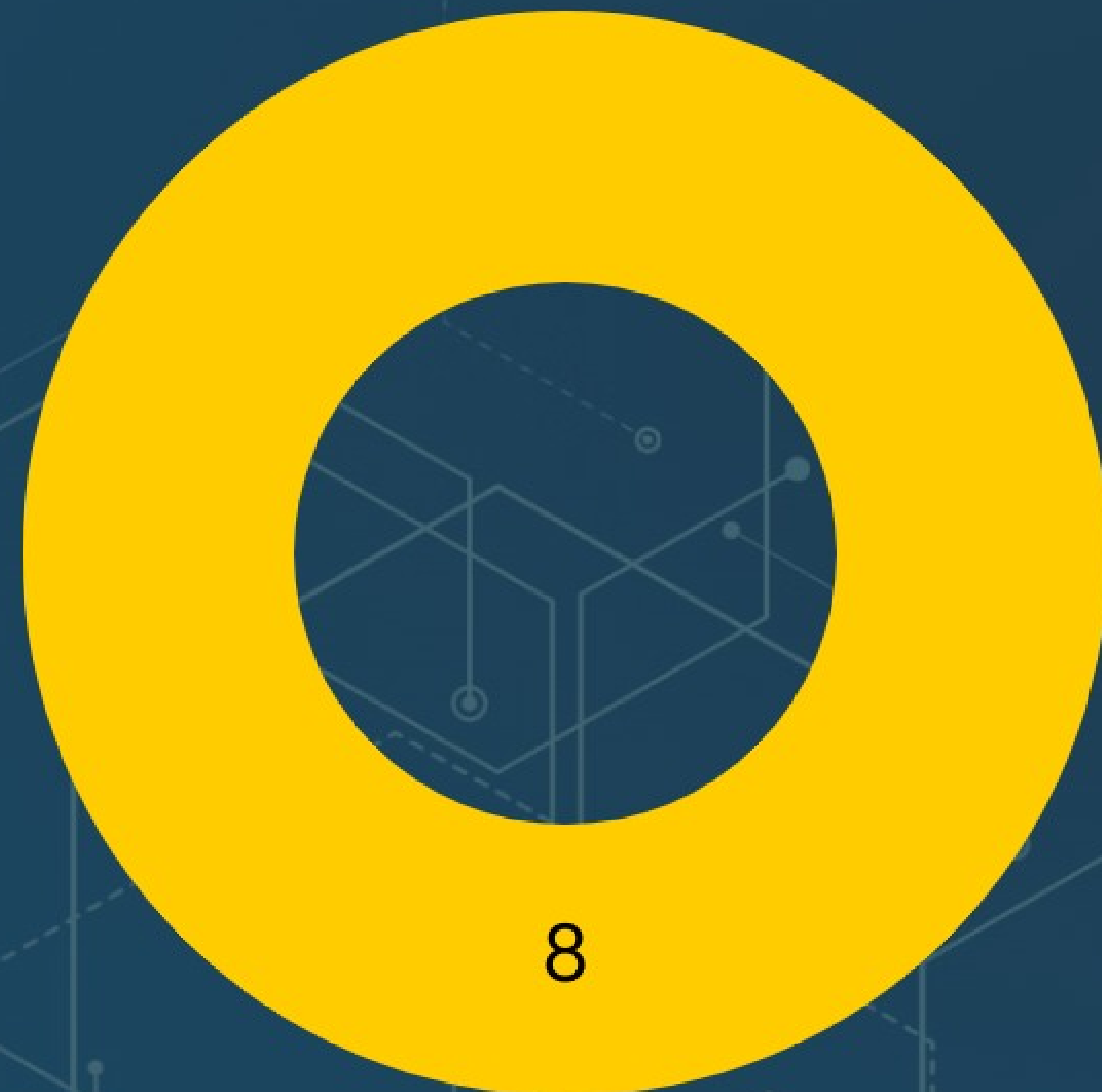
hibernate

What is *detached* state? vs *transient* ? vs *remove*?

10 responses

hibernate
onetoone
jpa
halo
lazy get
save query

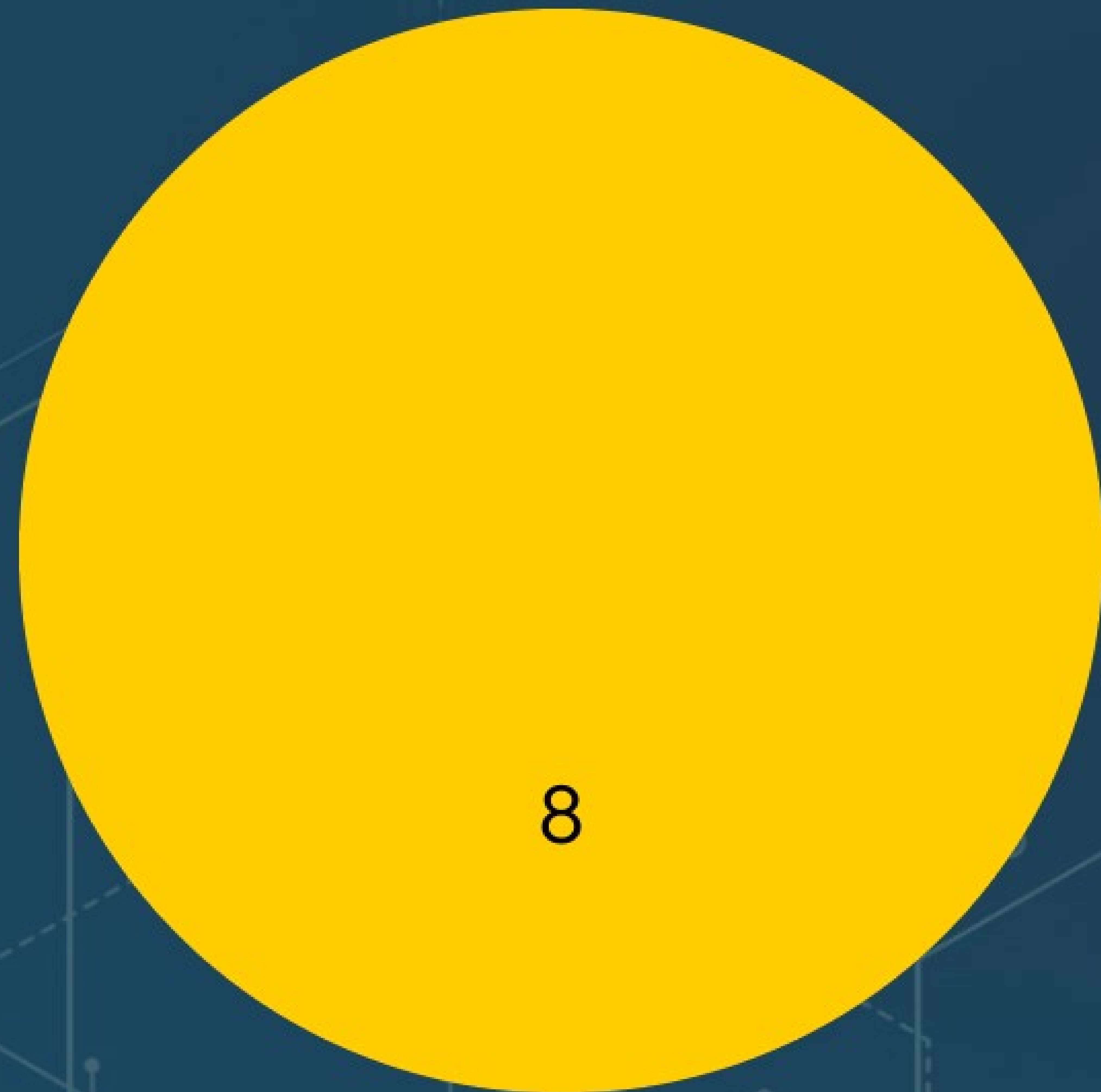
What does FetchType.LAZY do in JPA?



- ☐ 0 Forces to eagerly load associated entities
- ☒ 8 Allows to delay loading of associated entities until they are accessed
- ☐ 0 Automatically saves associated entities when parent entity is saved
- ☐ 0 Deletes associated entities when parent entity is deleted

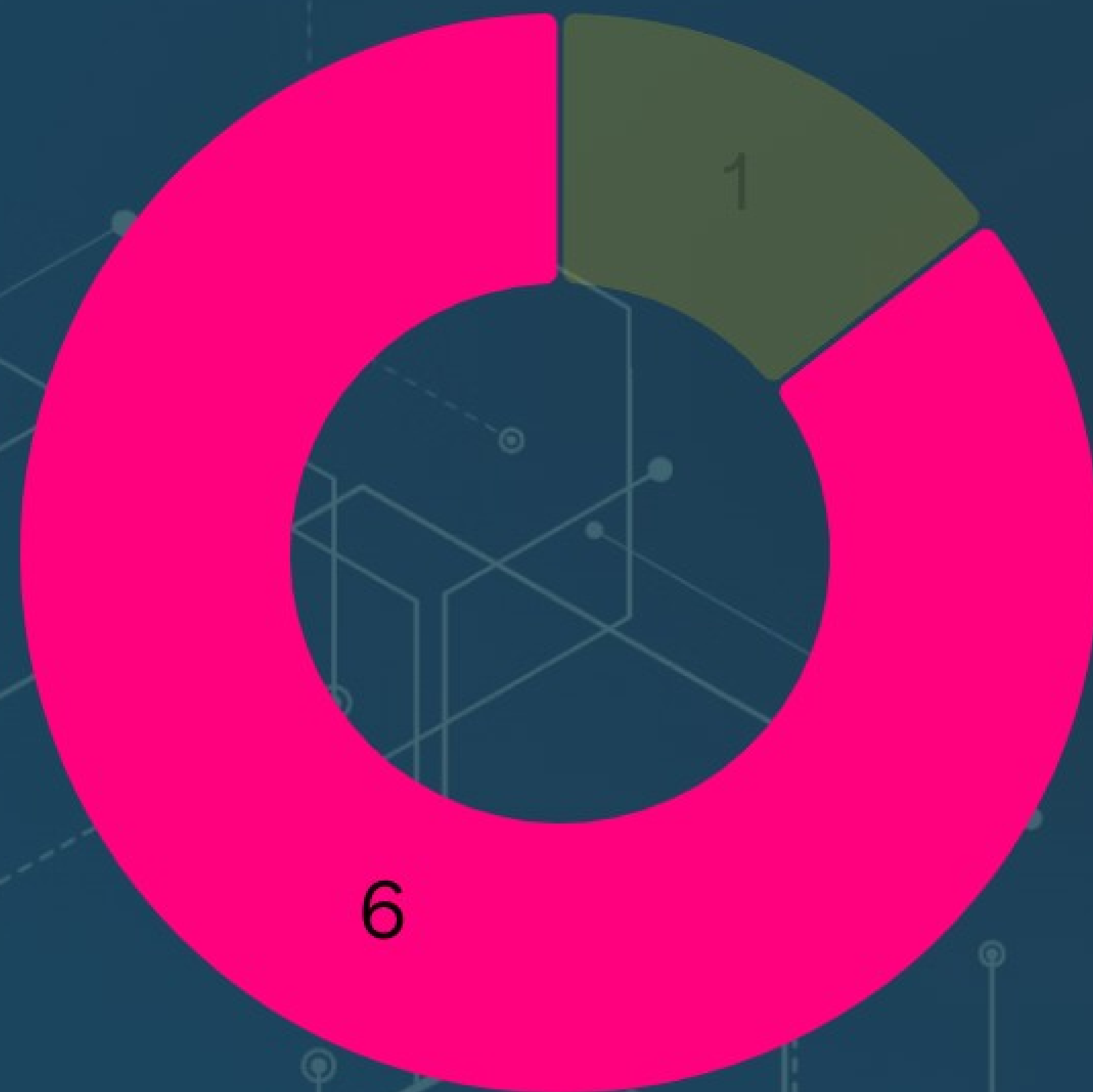


What's the purpose of *orphanRemoval* flag?



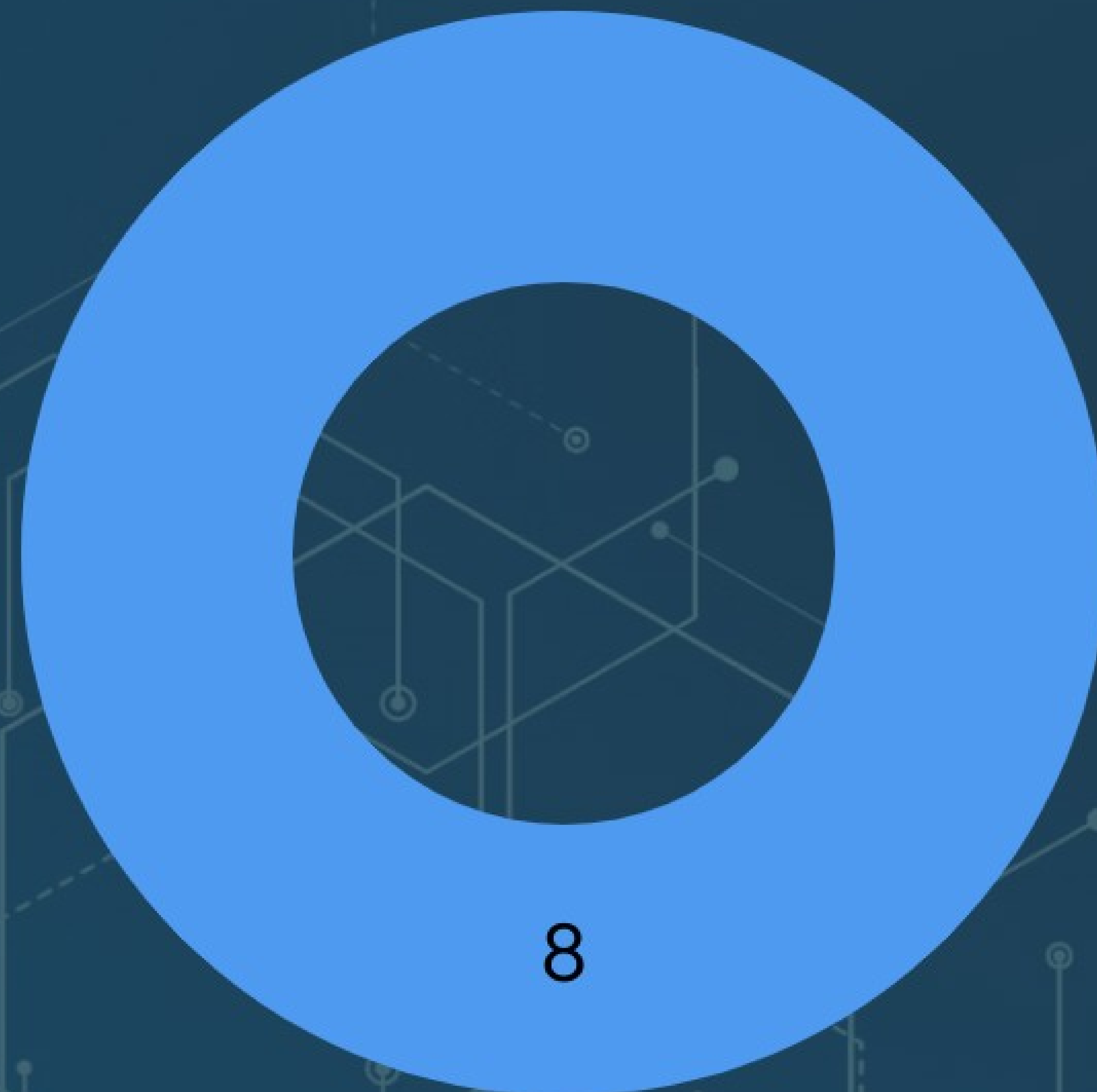
- ☐ 0 Same as Cascade Delete ☐
- ☒ 8 Child entity can not exist without Parent, and should be deleted ☒
- ☐ 0 When Child entity is deleted, then Parent Entity would be deleted ☐

What's the main disadvantage of using *CascadeType.REMOVE*?



0	No disadvantages	✗
1	Performance Impacts	✗
6	Entire database can be dropped	✓
0	Complexity in Data Models	✗

What annotation(s) are used to setup a *compound* key?



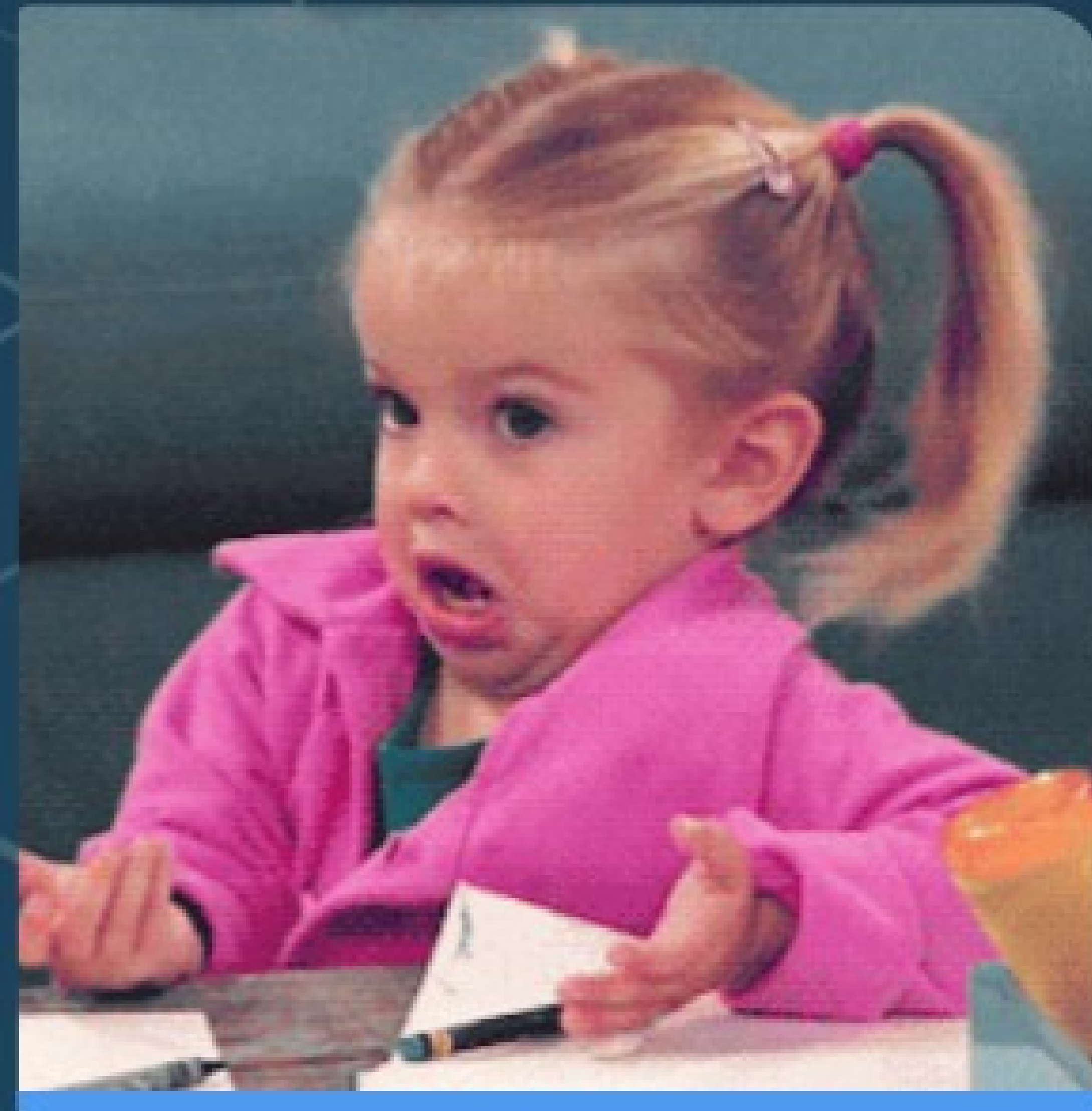
- | | | |
|---|------------------------------|---|
| 8 | @EmbeddedId and @Embeddable | ✓ |
| 0 | It is yet impossible in JPA | ✗ |
| 0 | @CompoundId and @CompoundKey | ✗ |

JPA (ws-06)

Normalization | Isolation | Transaction | Query

Have you started the theory of 'JPA'?

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Database normalization

https://en.wikipedia.org/wiki/Database_normalization

https://en.wikipedia.org/wiki/Third_normal_form

ACID

<https://en.wikipedia.org/wiki/ACID>

Isolation

[https://en.wikipedia.org/wiki/Isolation_\(data_base_systems\)](https://en.wikipedia.org/wiki/Isolation_(data_base_systems))

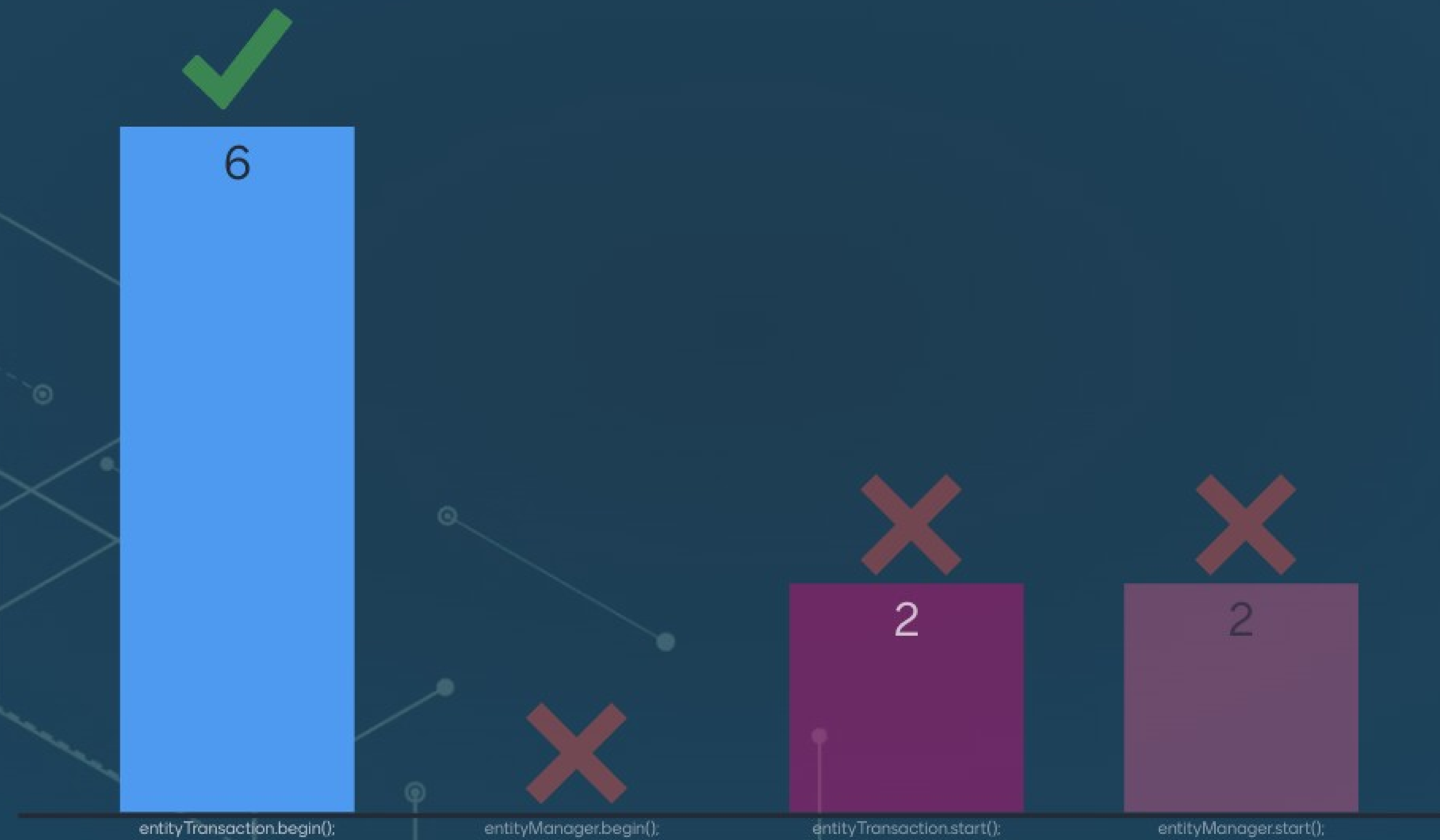
Explore module ws-06

<https://github.com/AndreiRohau/itpu-java-web-2025>

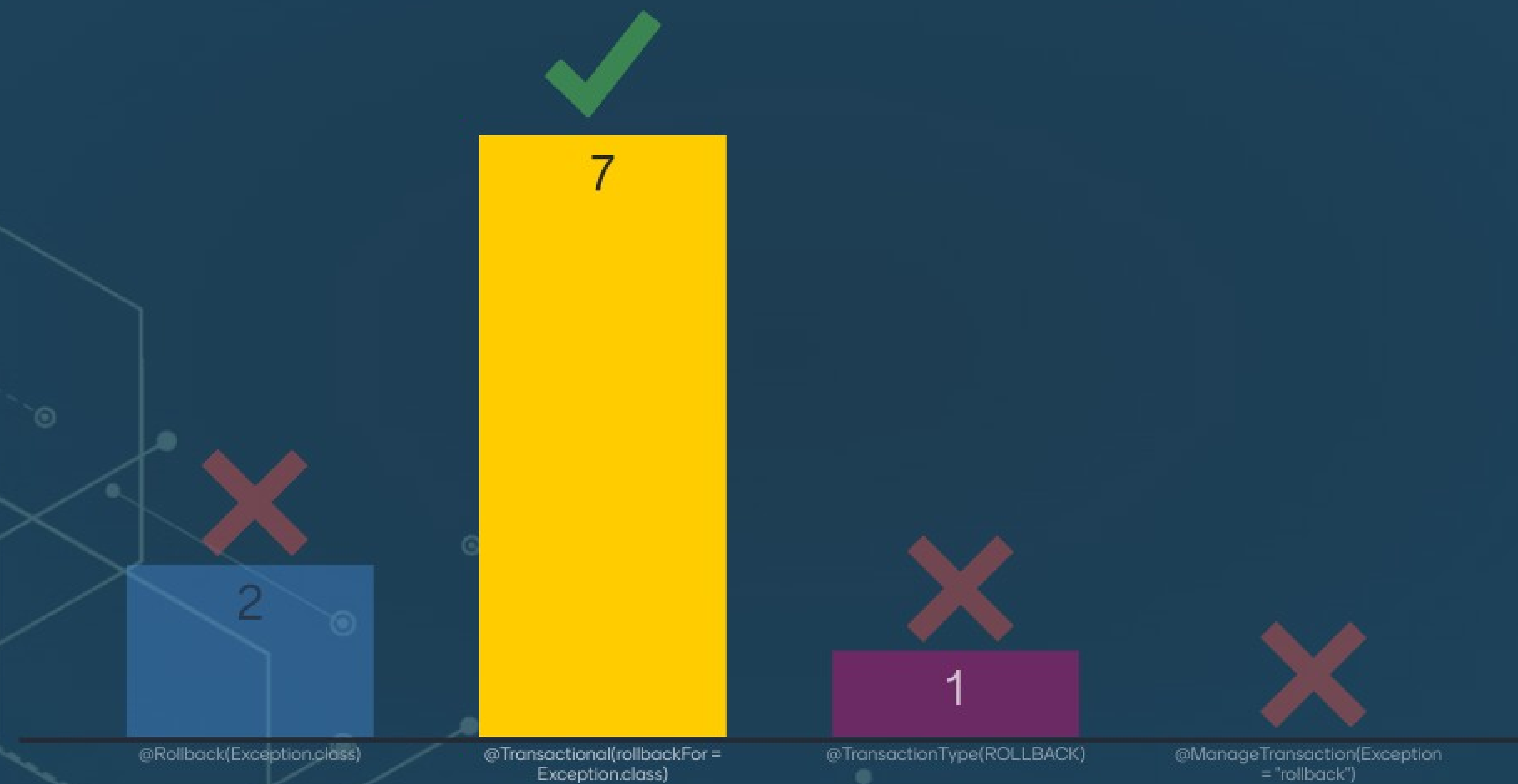
10 mins break

Quiz

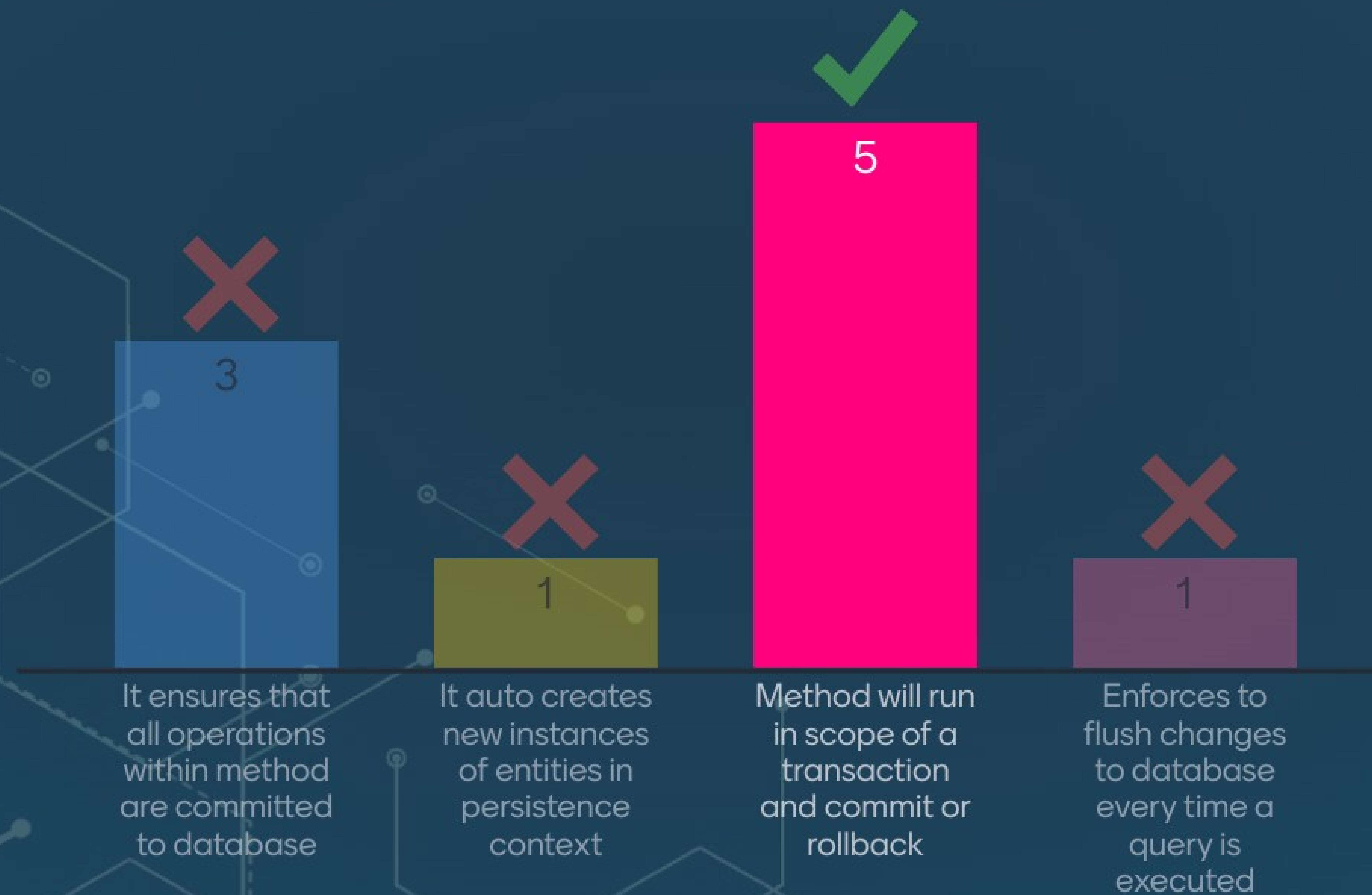
How do you begin a transaction in JPA?



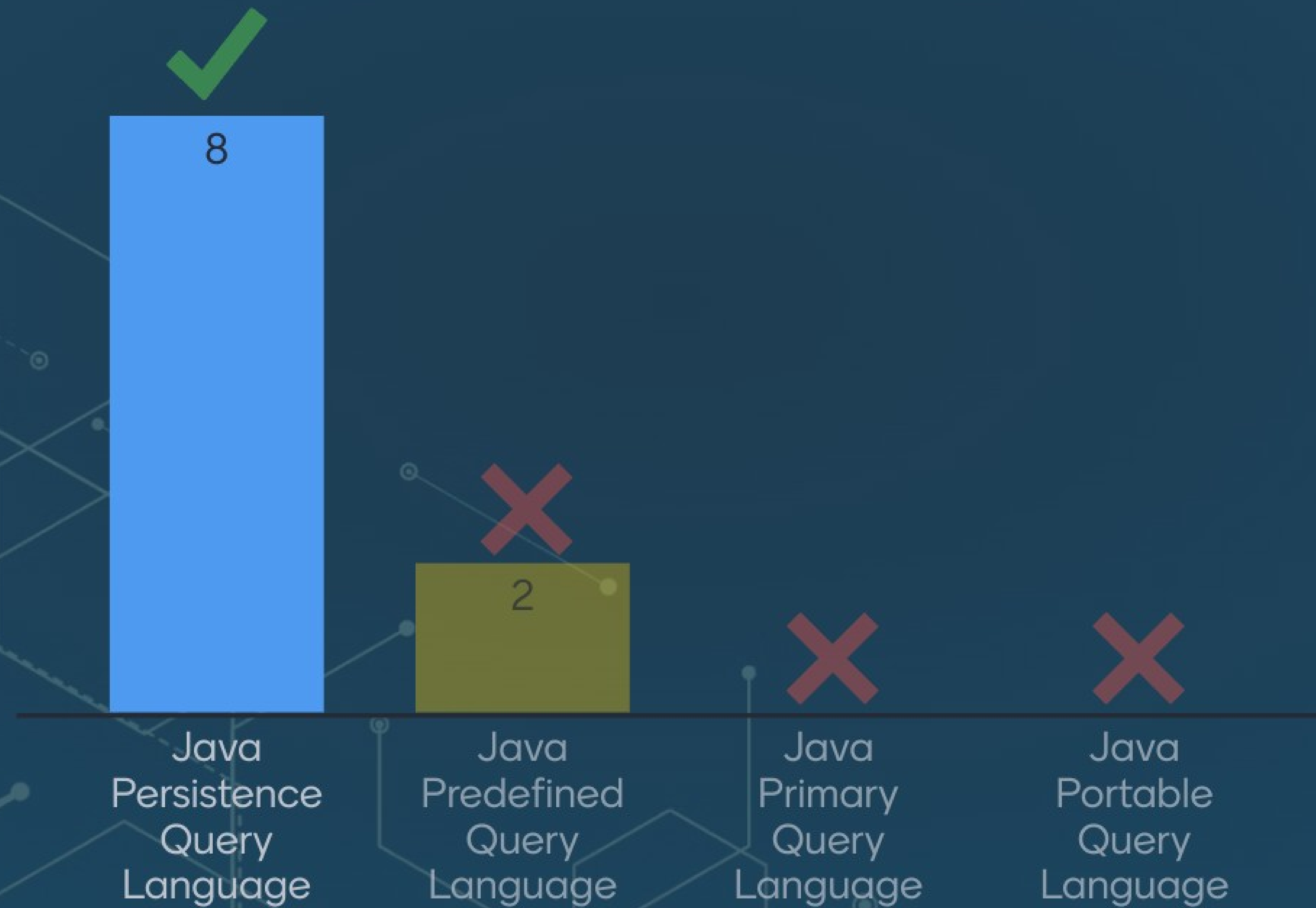
In JPA, what annotation is used to rollback a transaction when a specific exception occurs?



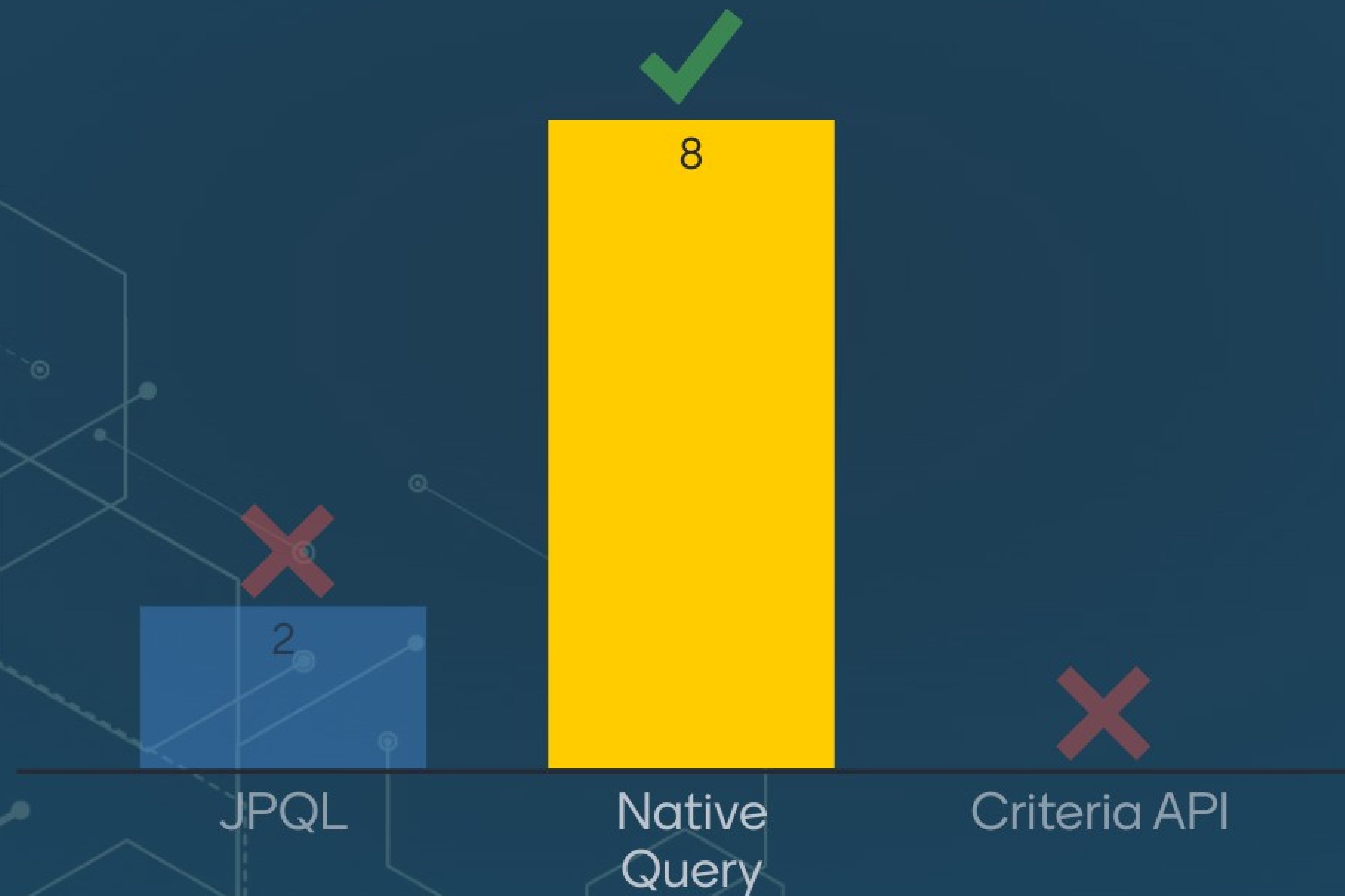
What is TRUE about @Transactional annotation in JPA?



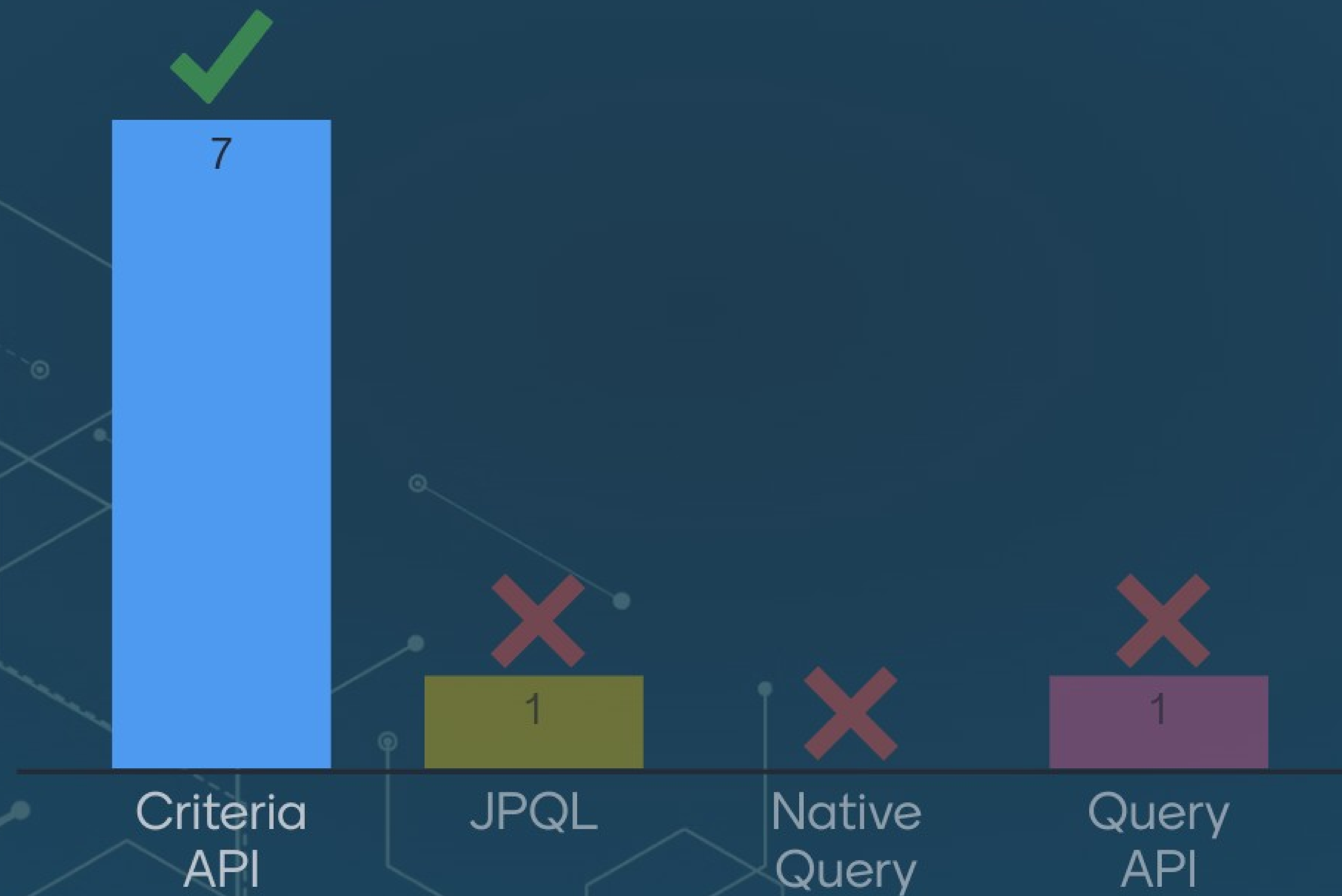
What does JPQL stand for?



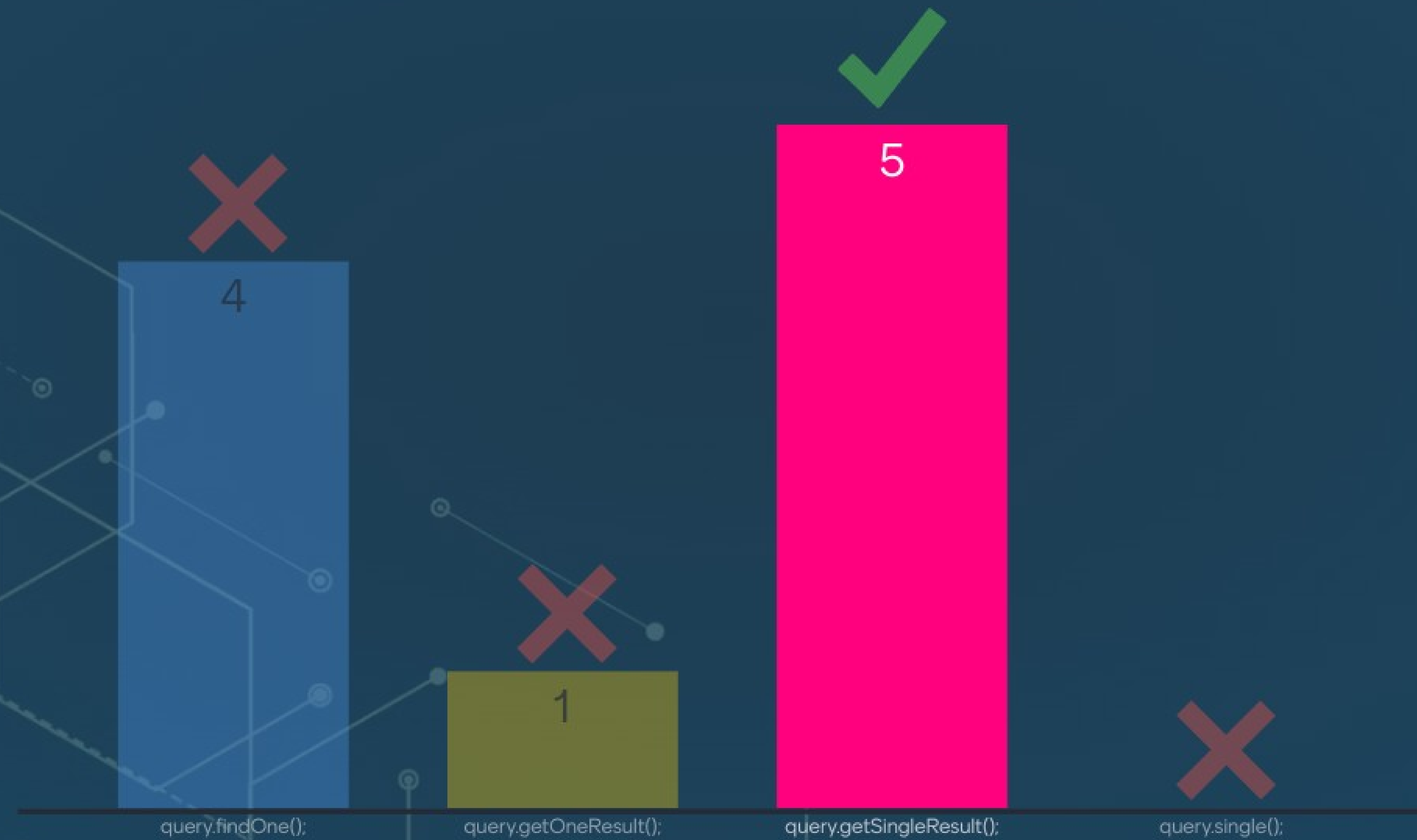
What approach allows you to use database-specific features in JPA?



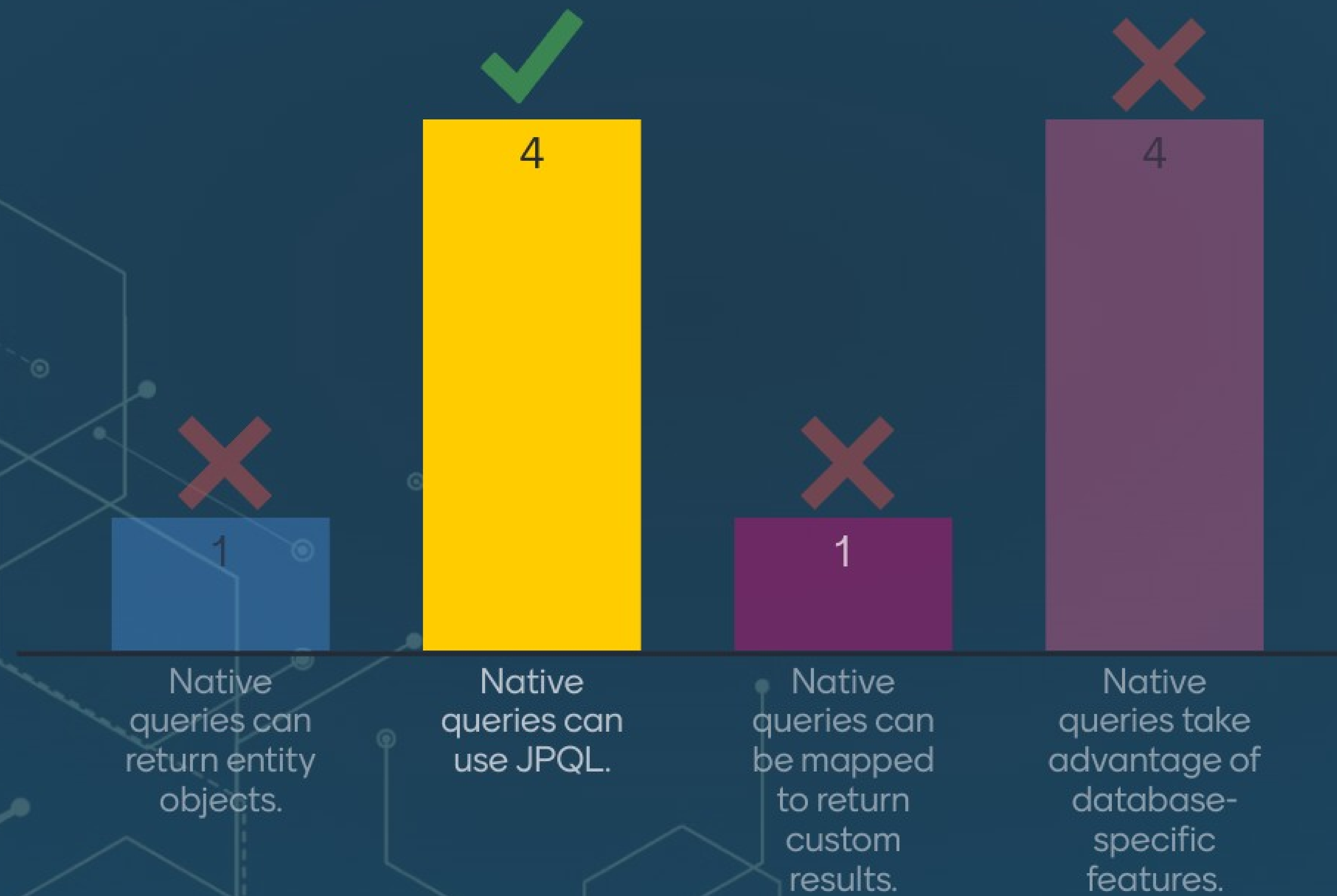
Which JPA API is used for type-safe queries?



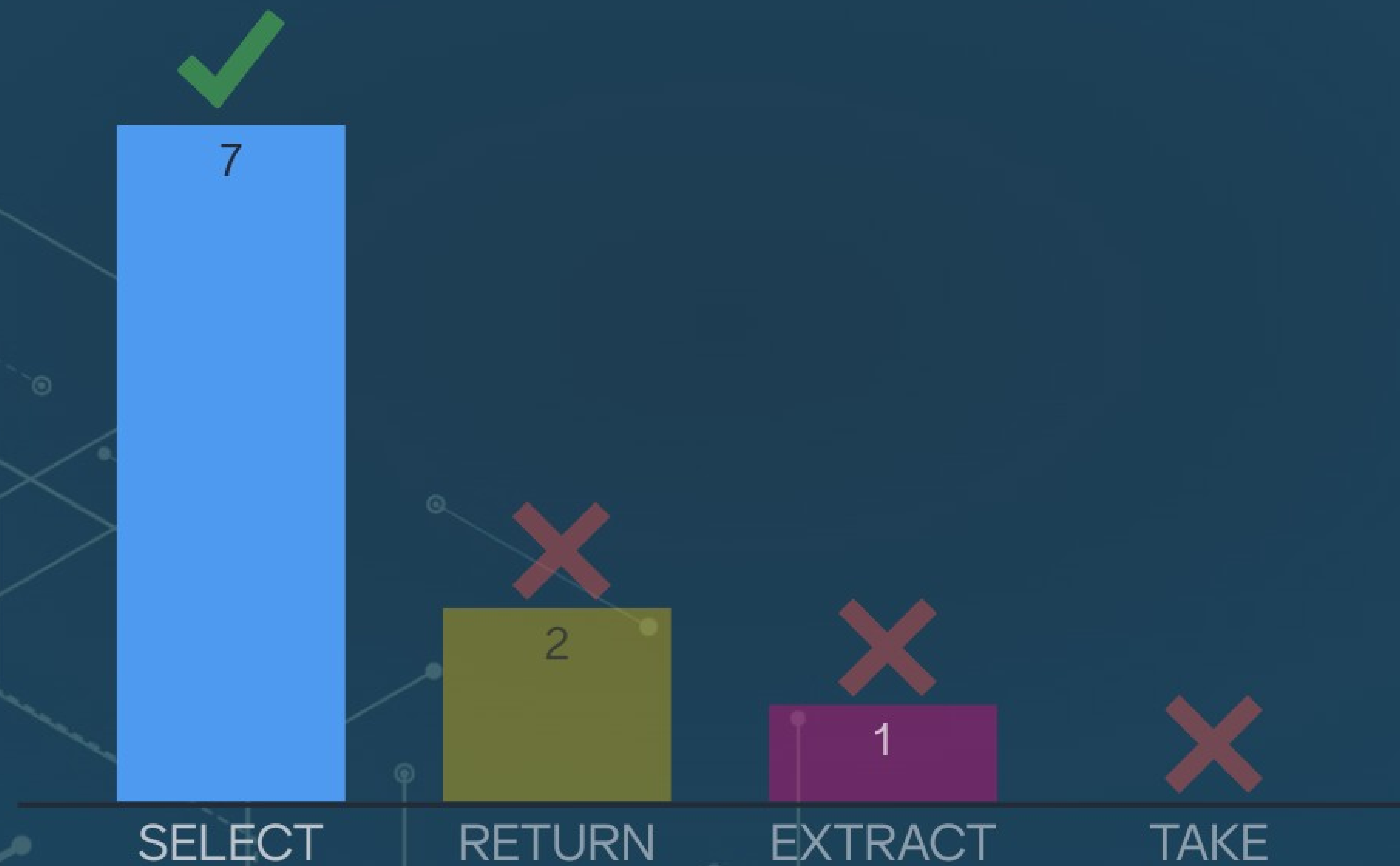
How would you retrieve a single result using JPQL?



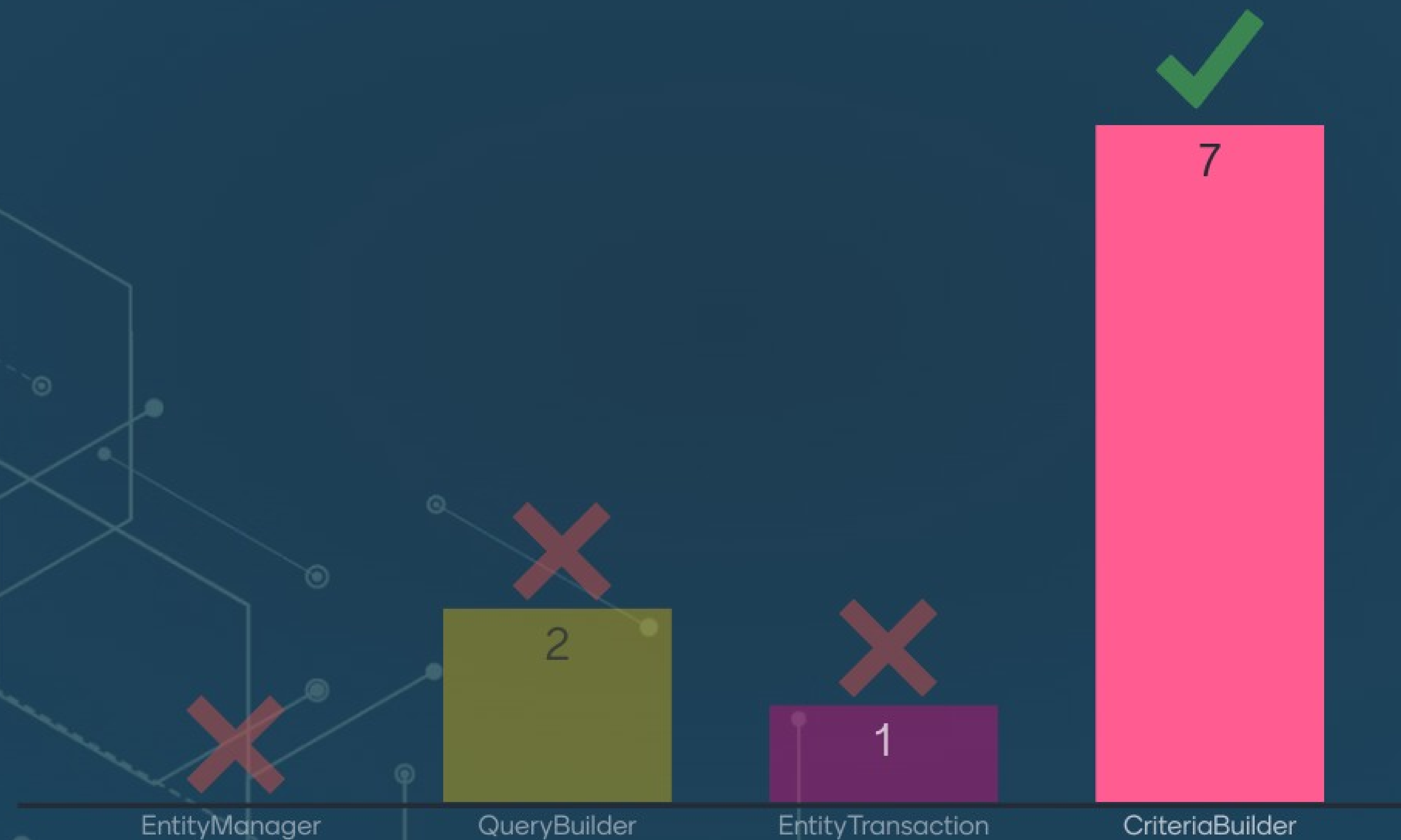
Which of the following is NOT true about native queries in JPA?



When using JPQL, which clause is used to specify the variables that should be returned in the result?



In a CriteriaQuery, what is used to create the various parts of the SQL query?



Quiz leaderboard



Discuss JPA practical task

Next time: Hibernate.

Questions?

