Wednesday, July 6, 2022 10:15 AM

HQL = Hibernate Query Language

SQL = Structured Query Language

HQL	SQL
This query refers to the entity **class** and entity properties	This query refers to database **table** and column
API --- session.createQuery(HQL)	API --- session.createSQLQuery(
hql = " select s.propertyName from study.entity.StudentEntity s"	sql = "select columnName from student "

M2(int x) OR int x = sc.nextInt()

String fn ----
"from study.entity.StudentEntity s where s.s.firstName = '"+**fn**+"'"

"from study.entity.StudentEntity s where s.firstName = :firstname"
query.setParameter("firstname",**fn**);

"from study.entity.StudentEntity s where s.rollNumber > "+x

"from study.entity.StudentEntity s where s.rollNumber > **:roll**" (:roll = **placeholder**)

query.setParameter(placeholder , x)

Chapter 14. HQL: The Hibernate Query Language (jboss.org)

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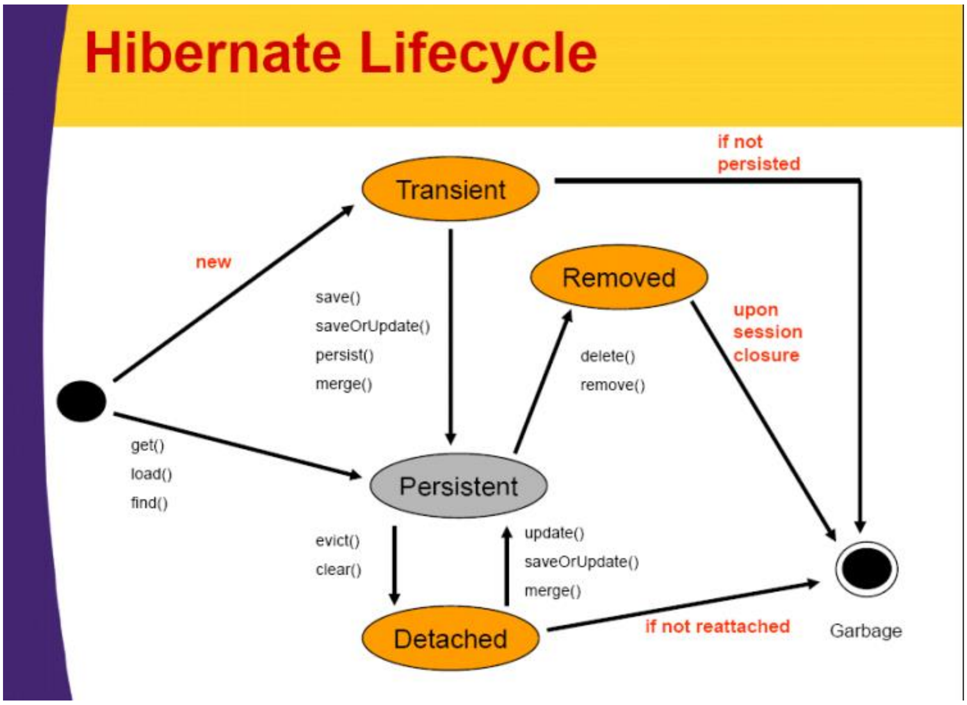
Entity Life Cycle in ORMs (Hibernate)

HibernateContext , PersistenceContext

ORM is doing Object Persistence = storing the object in RAM(volatile storage) TO a non volatile storage (DB)
(Serialization was object persistence in core java)



Hibernate Lifecycle

WHEN the object is in the PERSISTENT STATE it is **managed** by the PersistenceContext
The object is in SYNC-UP   with the DB table row !!! ---- if we change the object then changes are reflected in the table and VICEVERSA !!!

HW ------------   FIND OUT THE STATE OF entity objects in the LIST returned by query.list()

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Hibernate = Independent Third Party Vendor
JPA = Java Persistence API = JEE API = To bring different ORM vendors under one umbrella/roof

The JPA provides a standard API for ORM access
so the same programs can be used with different ORMs **without changing code** BUT the configuration has to be changed.

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Spring Framework	Spring Boot

We will use
Spring Boot(REST Controller) +
JPA support + Hibernate (application . properties) +
MySQL connector(pom entry) +
MySQL server