**Hands on 1**

**Introduction to HQL and JPQL**

* Hibernate Query Language and Java Persistence Query Language are object-oriented query languages that work with Java entity objects rather than directly with database tables.
* This makes it easier to write cleaner, portable, and database-agnostic code.
* JPQL is part of the JPA (Java Persistence API) standard, while HQL is specific to Hibernate and extends JPQL with additional features like the INSERT operation.
* Both allow querying with SELECT, UPDATE, and DELETE, using class and field names instead of SQL table and column names.

**Example:**

* **Select Query (JPQL/HQL):**

@Query("SELECT e FROM Employee e WHERE e.salary > 50000")

List<Employee> findHighSalaryEmployees();

* **Update Query (JPQL/HQL):**

@Modifying

@Query("UPDATE Employee e SET e.salary = e.salary + 1000 WHERE e.salary < 40000")

void increaseLowSalaries();

* **Delete Query (JPQL/HQL):**

@Modifying

@Query("DELETE FROM Employee e WHERE e.salary < 20000")

void deleteLowSalaryEmployees();

* **HQL INSERT (HQL only, not JPQL):**

INSERT INTO Employee (id, name, salary, department)

SELECT e.id, e.name, e.salary, e.department FROM TempEmployee