

06 - Query DSL

In JPQL (Java Persistence Query Language), queries are based on the **entity class** names and their fields, not on database table names or column names.

- JPA provides a powerful query method DSL that defines queries based on method names such as `findBy`, `findAllBy`, `findByName`, `findByMarksGreaterThan`, etc.
- If more complex queries are needed beyond what is automatically generated by the method names, **@Query** annotation can be used to define custom JPQL queries.

Example:

StudentRepo.java

```
@Repository
public interface StudentRepo extends JpaRepository<Student, Integer> {

    // @Query("select s from Student s where s.name=?1")
    // List<Student> findByName(String name);
    // List<Student> findByMarks(int marks);
    List<Student> findByMarksGreaterThan(int marks);
}
```

SpringDataJpaExApplication.java

```
@SpringBootApplication
public class SpringDataJpaExApplication {

    public static void main(String[] args) {
        ApplicationContext context =
            SpringApplication.run(SpringDataJpaExApplication.class, args);
        Student s1= context.getBean(Student.class);
        Student s2=context.getBean(Student.class);
        Student s3=context.getBean(Student.class);

        StudentRepo repo=context.getBean(StudentRepo.class);
        //System.out.println(repo.findByName("Navin"));
        //System.out.println(repo.findByMarks(80));
        System.out.println(repo.findByMarksGreaterThan(72));
    }
}
```

Code Link :

<https://github.com/navinreddy20/spring6-course/tree/c6690e4f2c70d8f530d70623f13d14ff0ffd7e7d/9%20Spring%20DataJPA/9.6%20Query%20Dsl>