Agenda.

- → Query Methods
  - → Declared Queries
  - → HQL
  - → SQL.
- → Representing Cardinalities.
  - → Mapped By
  - → Cascading
- → Fetch Types
  - Eager
  - Lazy
- → Schema Versioning.

JPA Repository

findById(–) ⇒

select * from products
where title like '% iphone %'

https://docs.spring.io/spring-data/jpa/reference/repositories/query-methods-details.html

Declared Queries.

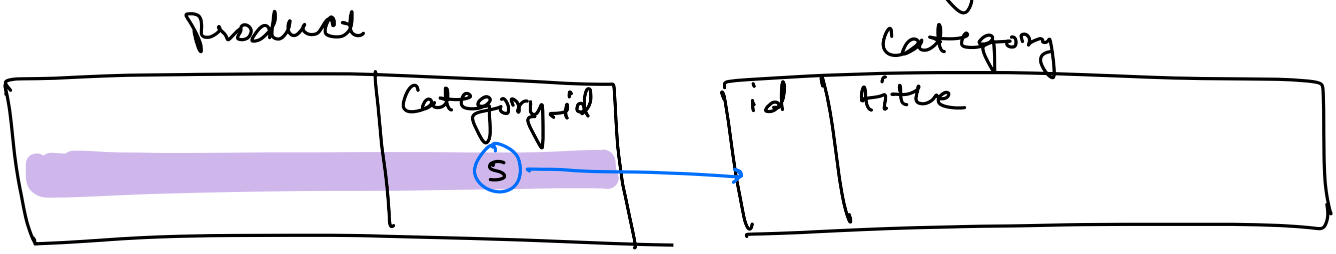
=> No need to write SQL queries on our own.

=> Just write the method name & ORM will convert that method name into corresponding query

Fetch Type.

```
Class Product {
    id
    title
    desc
    ≡
    Category        EAGER.
}
```

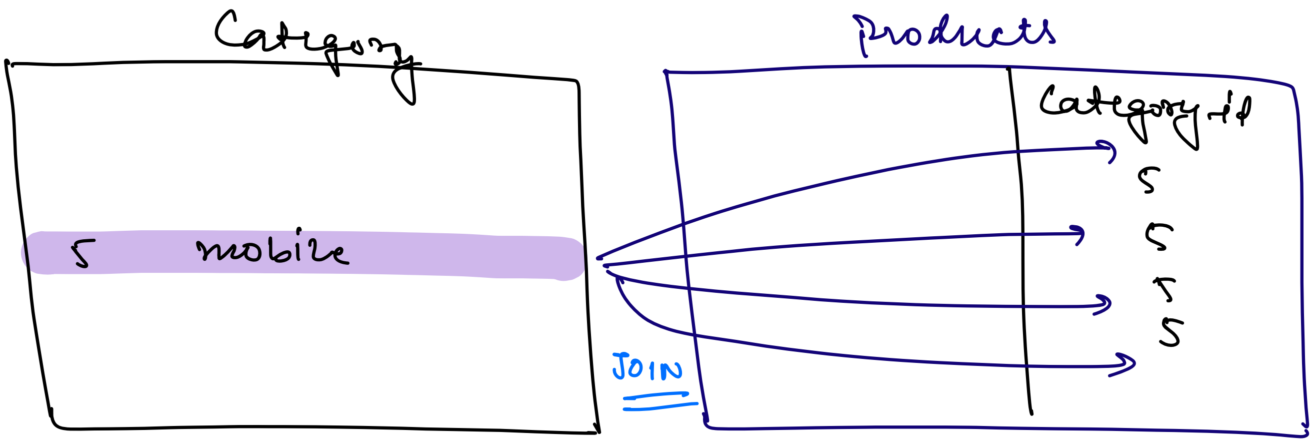
```
Product p = ProductRepo.findById(10)
```

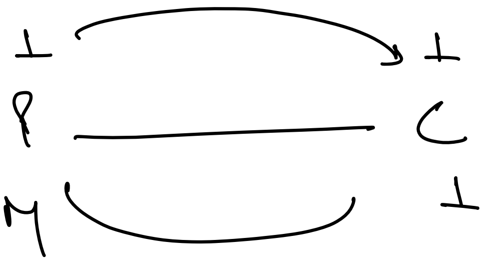


Left Join

```
Class Category {
    id
    title
    List<Product> products  → Lazy
}
```

```
Category c = categoryRepository.findById(5)
```





When a class has an attr of another class then to fetch the details of other attrs, **JOIN** operation needs to be performed.

⇒ Fetch Type
- Eager
- Lazy

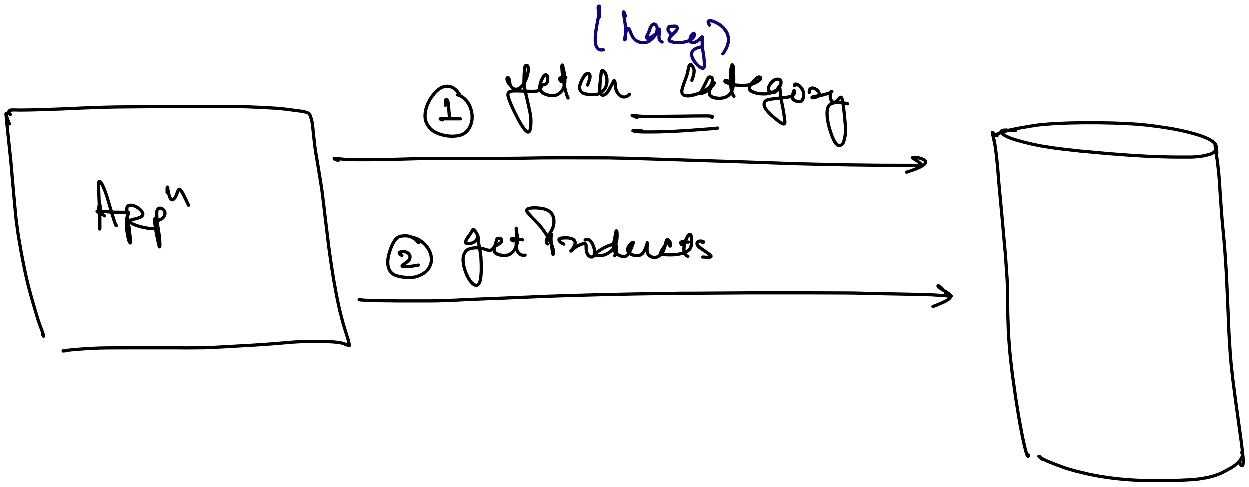
Eager : Fetch the details of inner object along with outer object.

Lazy : Don't fetch the details of inner object along with the outer object.

Only fetch when required.

```
Category c = CategoryRepository.findById(10)

List<Product> Products = c.getProducts()
```



⇒ By default, all the attrs are fetched EAGERly except collections.

⇒

```
A {

    B b; ⇒ EAGER.

}
```

⇒ JOIN.

```
X {

    List<Y> ⇒ LAZY

}
```

HQL & SQL

↓

Hibernate Query Language.

SQL + OOPS.

⇒ We don't have complete control over the declared query.

⇒ Performance.

⇒ If we have usecase of writing custom queries, we can write using HQL / SQL.