

```
package jpa;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.CommandLineRunner;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

//@SpringBootApplication
public class Test implements CommandLineRunner {
    @Autowired
    private CategoryRepo catRepo;

    public static void main(String[] args) {
        SpringApplication.run(Test.class, args);
    }

    public void displayAll() {
        // display all categories
        for (var c : catRepo.findAll())
            System.out.println(c.getDescription());
    }

    public void addCategory(String code, String desc) {
        var c = new Category();
        c.setCode(code);
        c.setDescription(desc);
        catRepo.save(c);
        System.out.println("Added Category");
    }

    public void displayLongCategories() {
        for (var c : catRepo.getLongCategories())
            System.out.println(c.getDescription());
    }

    public void displayLongCategories(int min, int max) {
        // JPQL
        for (var c : catRepo.getLongCategories(min, max))
            System.out.println(c.getDescription());
    }

    public void displayCategoriesByLongDesc(int min, int max) {
        // Native Query
        for (var c : catRepo.getCategoriesByLength(min,max))
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        System.out.println(c.getDescription());
    }

    public void displayCategoriesByDesc(String desc) {
        // display all categories
        for (var c : catRepo.findByDescriptionContaining(desc))
            System.out.println(c);
    }

    @Override
    public void run(String... args) throws Exception {

        //System.out.println(catRepo.getClass());
        //displayAll();

        Category cat = catRepo.findByDescription("Printer");
        System.out.println(cat);

        // displayCategoriesByDesc("o");
        // System.out.println(catRepo.countByDescriptionContaining("o"));

        //displayLongCategories();
        //displayLongCategories(5,10);

        // displayCategoriesByLongDesc(10,20);
    }
}
```