

```
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;
import org.springframework.data.domain.PageRequest;
import org.springframework.data.domain.Sort;

@SpringBootApplication
public class TestProducts implements CommandLineRunner {
    @Autowired
    private ProductRepo productRepo;

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

    public void printPage(int pageno) {
        var page = productRepo.findAll( PageRequest.of(pageno, 5));

        for(var p : page)
            System.out.println(p.getName());

    }

    public void sortByCategoryAndPrice() {
        var page = productRepo.findAll(Sort.by("category").ascending()
            .and(Sort.by("price").descending()));

        for(var p : page)
            System.out.printf("%-10s %-30s %8.2f\n", p.getCategory().getCode(),
                p.getName(), p.getPrice());
    }

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

        //          for ( var p : productRepo.findAll()) {
        //              System.out.printf("%-20s %-20s\n",
        //                  p.getName(), p.getCategory().getDescription());
        //          }

        //          for (var p : productRepo.getAllNameDesc()) {
        //              System.out.printf("%-20s %-20s\n", p.getName(), p.getCategory().getDescription());
        //          }

        //printPage(0);
        sortByCategoryAndPrice();
    }
}
```