Assignment for Week 4

Implement the features for choice between 2 and 5.

```
*** MAIN MENU ***
0. Exit
1. List all products
2. Search product by id
3. Search products by category
4. Search products by name
5. Search products by price range
6. Add new product
7. Update existing product details
8. Delete a product details
Enter your choice: (0-8)
```

In the **HashMapProductDao** class implement the code for the following methods:

```java
no usages   new *
public Product getProductById(int id){
    // TODO: search and return the product with the given id
    return null;
}


no usages   new *
public List<Product> getProductsByCategory(String category){
    // TODO: Search products belonging to the given category
    return null;
}
no usages   new *
public List<Product> getProductsByName(String name){
    // TODO: Search products having the given 'name' in their product-name (partial match is enough)
    return null;
}
no usages   new *
public List<Product> getProductsByPriceRange(double min, double max){
    // TODO: Search products having price between 'min' and 'max' and return the same
    return null;
}
```

In the ProductManager class write suitable methods to call the above methods, and in the App, call the ProductManager's methods to complete the working application.

Make sure all exceptions are handled properly and ensure the application doesn't break during the execution.