```
1 Create the following application
 2
 3
     Create the maven application and add the relevant dependencies discussed during
     theory session
 4
     Class Product(int productId, String productName, String productDescription, double
 5
     price, int quantity)
     Provide the appropriate Constructors, accessors, mutators, to String
 6
 7
 8
     Create a properties file/ Helper class as discussed during theory session for
     declaring and loading jdbc related configuration
 9
     Interface ProductDAO
10
11
       void createConnection( )
12
       void closeConnection( )
13
       void addProduct(Product product)
       Product getProduct(int productId)
14
15
       List<Product>getAllProducts()
       void updateProduct(Product product)
16
17
       void deleteProduct(int productId)
18
     Class ProductDAOImpl that implements the ProductDAO and appropriately provides
     the implementation to the
19
       functionality.
20
21
     Class ProductSortingUtility with below methods that sort and print the products
     accordinaly
       void sortDefault(List<Product> products) (by productId)
22
       void sortByProductName(List<Product> products)
23
       void sortByProductPrice(List<Product> products)
24
25
       void sortByProductQuantity((List<Product> products))
26
27
     Interface ProductService
       void createProduct(Product product)
28
29
       void findProductById(int productId)
30
       List<Product> findAllProducts()
       void modifyProduct(Product product)
31
32
       void removeProduct(int productId)
33
       void sortById(List<Product> products) (by productId)
       void sortByProductName(List<Product> products)
34
       void sortByProductPrice(List<Product> products)
35
36
       void sortByProductQuantity((List<Product> products))
37
38
     Class ProductServiceImpl that implements the ProductService and appropriately
     implements the methods
39
       This service will use the ProductSortingUtility for relevant sorting operations
40
41
```

42

Class TestProductSorting

43 main method.

44

45 Add about 10 products to table

46 Show a menu for listing the products as per sorting criteria.

47 Test the other CRUD methods as exposed by service.

48