LAB SUBMISSION 5 – 221047012

[1]. Develop an application sub system that allows the Managing the Products in a Product Store. You should be able to Add/Update a product detail as well as View the product details. Use the File System as your Data store.

Code:

```java
package _221047012;

import java.io.FileWriter;
import java.time.LocalTime;
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.ListIterator;
import java.util.Scanner;

class addProduct{
    private int id;
    private String product;
    private int numProduct;

    addProduct(int id,String p,int nP) {
        this.id = id;
        this.product = p;
        this.numProduct = nP;
    }

    public String toString(){
        return id+"\t"+product+"\t\t"+numProduct;
    }

    public int getId() {
        return id;
    }

    public String getProduct() {
        return product;
    }
}



class Ecommerce{

    public static void main(String[] args) {


        List<addProduct> c = new ArrayList<addProduct>();
        Scanner s = new Scanner(System.in);
        Scanner s1 = new Scanner(System.in);
        int ch;
```

```java
do {
    System.out.println("1.Choose 1 to Add product details");
    System.out.println("2.Choose 2 to update product details");
    System.out.println("3.Choose 3 to Display Product details1");
    System.out.print("Enter your choice  : ");
    ch = s.nextInt();

    switch(ch) {
        case 1:
            System.out.println("Enter Product ID : ");
            int id = s.nextInt();
            System.out.println("Enter Product Name : ");
            String name = s1.nextLine();
            System.out.println("Enter number of product : ");
            int numProduct = s.nextInt();

            c.add(new addProduct(id,name,numProduct));
            break;
        case 2:
            boolean found = false;
            System.out.println("Enter Product ID to Update: ");
            id = s.nextInt();
            System.out.println("--------------------------");
            ListIterator<addProduct> li = c.listIterator();
            while(li.hasNext()) {
                addProduct p = li.next();
                if(p.getId() == id){
                    System.out.println("Enter number of Products: ");
                    name = p.getProduct();
                    numProduct = s.nextInt();
                    li.set(new addProduct(id,name,numProduct));
                    found = true;
                }
            }

            if(!found) {
                System.out.println("Product Not Found");
            }
            else {
                System.out.println("Product updated Successfully..!");
            }
            System.out.println("-----------------------------------");
            break;
        case 3:
            System.out.println("-----------------------------------");
            Iterator<addProduct> i = c.iterator();
            LocalTime t;
            t =java.time.LocalTime.now();
            try {
                FileWriter wr = new FileWriter("Product Details.txt", true);
                wr.write("\n");
                wr.write(t.toString());
                wr.write("\n\n");
                System.out.println("ID\tProduct\t\tQuantity");
```

```
            String a = "ID\tProduct\tQuantity";
            wr.write(a);
            wr.write("\n\n");
            while(i.hasNext()) {
                addProduct p = i.next();
                System.out.println(p);
                String st = String.valueOf(p);
                wr.write(st);
                wr.write("\n");
            }
            wr.close();
          }
          catch(Exception e){
            System.out.println("File doesn't exist ");
          }
          System.out.println("--------------------------");
          break;
        }
    }while(ch!=0);
  }
}
```

Output:

The below snapshots show the adding, updating and displaying the products into the file.

Lab5_Ecommerce C:\Users\User\IdeaProjects\Lab5_Ecommerce
> .idea
> out

package _221047012;

Run: Ecommerce ×

```
1.Choose 1 to Add product details
2.Choose 2 to update product details
3.Choose 3 to Display Product details1
Enter your choice  : 3
-----------------------------------
ID   Product      Quantity
10   Soap          100
20   Comfort       200
30   Brush         300
-----------------------------
1.Choose 1 to Add product details
2.Choose 2 to update product details
3.Choose 3 to Display Product details1
Enter your choice  : 2
Enter Product ID to Update:
20
-----------------------------
Enter number of Products:
0
Product updated Successfully..!
-----------------------------------
```

```
Product updated Successfully..!
-----------------------------------
1.Choose 1 to Add product details
2.Choose 2 to update product details
3.Choose 3 to Display Product details1
Enter your choice  : 3
-----------------------------------
ID   Product      Quantity
10   Soap          100
20   Comfort       0
30   Brush         300
-------------------------
1.Choose 1 to Add product details
2.Choose 2 to update product details
3.Choose 3 to Display Product details1
Enter your choice  : 0
```

The below snapshot shows the product details stored in a "Product Details.txt" file

Product Details - Notepad
File Edit Format View Help

```
23:44:20.884665400

ID          Product  Quantity

10          Soap              100
20          Comfort           200
30          Brush             300

23:45:24.264831

ID          Product  Quantity

10          Soap              100
20          Comfort           0
30          Brush             300
```