Develop an application sub system that allows the Managing the Products in a Product Store. You should be able to Add/Update a product details as well as View the product details. Use the File System as your Data store and file path specified in the properties file.

```java
package MN_221047014;
import java.util.Scanner;
public class Main {
    public static void main(String[] args) throws Exception {
        IOperations newProduct = new IOperations();
        Operations display=new Operations();
        System.out.println("please select your choice:\n 1 - Add\n 2 -
Update\n 3 - Display");
        int choice;
        Scanner sc = new Scanner(System.in);
        choice = sc.nextInt();
        switch(choice) {
            case 1:newProduct.addProd();
                    break;
            case 2:newProduct.updateProd();
                    break;
            case 3:display.Display();
                    break;
            default:System.out.println("Please enter proper input\n");
        }
    }
}




package MN_221047014;

import java.io.*;
import java.util.*;

public class Operations implements ProductStore{

    @Override
    public void addProduct(int product_id, String product_name, int
product_price)throws IOException{

        FileWriter fw = null;
        BufferedWriter bw = null;
        PrintWriter pw = null;
        FileReader reader = new FileReader("names.properties");
      Properties p = new Properties();
      p.load(reader);
        String filepath=p.getProperty("path");
        try (FileWriter f = new FileWriter(filepath, true);
             BufferedWriter b = new BufferedWriter(f);
             PrintWriter pi = new PrintWriter(b);)
        {
            pi.print(product_id+ " ");
            pi.print(product_name+" ");
            pi.println(product_price);
            System.out.println("Product added to file succesfully");
        }
        catch (IOException i)
        {
            i.printStackTrace();
```

```java
            }


    }


    @Override
    public void upDate(int product_id, String product_name, int
product_price) throws IOException {
        FileReader reader = new FileReader("names.properties");
        Properties p = new Properties();
        p.load(reader);
            String oldLine = "";
            String filepath=p.getProperty("path");
            Scanner sc = new Scanner(new File(filepath));
            StringBuffer buffer = new StringBuffer();
            while (sc.hasNextLine()) {
                String line = sc.nextLine()+System.lineSeparator();
                 String[] parts = line.split(" ");
                 if(Integer.parseInt(parts[0])==product_id)
                 {
                        oldLine=line;
                 }
                 buffer.append(line);
            }
            String fileContents = buffer.toString();
            System.out.println("old Contents of the file:\n "+fileContents);
            sc.close();

            String newLine = product_id+" "+ product_name+" "+product_price
+"\n";
            //Replacing the old line with new line
            fileContents = fileContents.replaceAll(oldLine, newLine);
            //instantiating the FileWriter class
            FileWriter writer = new FileWriter(filepath);
            System.out.println("");
            System.out.println("File content after update: \n"+fileContents);
            writer.append(fileContents);
            writer.flush();

    }
    public void Display() throws IOException {

      FileReader reader = new FileReader("names.properties");

        // create properties object
        Properties p = new Properties();

        // Add a wrapper around reader object
        p.load(reader);

        String filepath=p.getProperty("path");

        try {
            File myObj = new File(filepath);
            Scanner myReader = new Scanner(myObj);
            while (myReader.hasNextLine()) {
              String data = myReader.nextLine();
              System.out.println(data);
            }
            myReader.close();
```

```java
            } catch (FileNotFoundException e) {
              System.out.println("An error occurred.");
              e.printStackTrace();
            }
        }
          }
```

```java
package MN_221047014;

import java.io.*;
import java.util.Scanner;

public class IOperations {
    ProductStore obj = (ProductStore) new Operations();
    Scanner sc = new Scanner(System.in);
    Scanner sc1 = new Scanner(System.in);
    int product_id,product_price;
    String product_name;
    public void addProd() throws IOException {


        System.out.println("Enter how many enters that needs to be added:
");
        int n = sc.nextInt();
        for (int i = 0; i < n; i++) {
            System.out.println("please enter product ID\n");
            product_id = sc.nextInt();
            System.out.println("please enter product Name\n");
            product_name = sc1.nextLine();
            System.out.println("please enter product Price\n");
            product_price = sc.nextInt();

            obj.addProduct(product_id, product_name, product_price);
        }
    }
    public void updateProd() throws IOException {
        System.out.println("Please enter the products you need to update:
\n ");

        System.out.println("please enter product ID\n");
        product_id = sc.nextInt();
        System.out.println("please enter product Name\n");
        product_name = sc1.nextLine();
        System.out.println("please enter product Price\n");
        product_price = sc.nextInt();
        obj.upDate(product_id, product_name, product_price);
    }
}
```

```java
package MN_221047014;


import java.io.FileNotFoundException;
import java.io.IOException;
```

```
interface ProductStore {
    public void addProduct(int product_id, String product_name, int
product_price) throws IOException ;
    void upDate(int product_id, String product_name, int product_price)
throws IOException;
    void Display() throws IOException;
}
```

Output 1:

```
please select your choice:
 1 - Add
 2 - Update
 3 - Display
1
Enter how many enters that needs to be added:
1
please enter product ID

50
please enter product Name

Nuts
please enter product Price

250
Product added to file succesfully
```

Output 2:

```
please select your choice:
 1 - Add
 2 - Update
 3 - Display
3
20 jam 20
30 butter 1
30 mattie 12
50 Nuts 250
```

Output 3:

```
please select your choice:
 1 - Add
 2 - Update
 3 - Display
2
Please enter the products you need to update:

please enter product ID

20
please enter product Name

Maggie
please enter product Price

50
old Contents of the file:
 20 jam 20
30 butter 1
30 mattie 12
50 Nuts 250


File content after update:
20 Maggie 50
30 butter 1
30 mattie 12
50 Nuts 250
```

Reference: Geeks for geeks,javaTpoint,stackoverflow.