

JAVA FUNDAMENTALS SECTION 5: Creating an Inventory Project

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Topic(s):

- Scanner/Keyboard Input
- Boolean fields and ternary operators

PROBLEM STATEMENT:

Create an inventory program that can be used for a range of different products.

CODE:

```
import java.util.Scanner;

class Product {

    private int number;

    private String name;

    private int qty;

    private double price;

    private boolean active;


    public Product() {

        this.number = 0;

        this.name = "";

        this.qty = 0;

        this.price = 0.0;

        this.active = false;

    }


    public Product(int number, String name, int qty, double price, boolean active) {

        this.number = number;

        this.name = name;
```

```
    this.qty = qty;

    this.price = price;

    this.active = active;
}
```

```
public int getNumber() {

    return number;

}
```

```
public void setNumber(int number) {

    this.number = number;

}
```

```
public String getName() {

    return name;

}
```

```
public void setName(String name) {

    this.name = name;

}
```

```
public int getQty() {

    return qty;

}
```

```
public void setQty(int qty) {

    this.qty = qty;

}
```

```
public double getPrice() {
```

```
        return price;
    }

    public void setPrice(double price) {
        this.price = price;
    }

    public boolean isActive() {
        return active;
    }

    public void setActive(boolean active) {
        this.active = active;
    }

    public double getInventoryValue() {
        return price * qty;
    }

    public String toString() {
        return "Item Number " + number + "\n" +
            "Name : " + name + "\n" +
            "Quantity in stock: " + qty + "\n" +
            "Price : " + price + "\n" +
            "Stock Value : " + getInventoryValue() + "\n" +
            "Product Status : " + (active ? "Active" : "Discontinued");
    }
}
```

```
public class ProductTester {  
  
    public static void main(String[] args) {  
  
        Scanner in = new Scanner(System.in);  
  
        int tempNumber;  
  
        String tempName;  
  
        int tempQty;  
  
        double tempPrice;  
  
        boolean tempActive;  
  
  
        System.out.print("Enter item number: ");  
  
        tempNumber = in.nextInt();  
  
        System.out.print("Enter item name: ");  
  
        in.nextLine();  
  
        tempName = in.nextLine();  
  
        System.out.print("Enter quantity: ");  
  
        tempQty = in.nextInt();  
  
        System.out.print("Enter price: ");  
  
        tempPrice = in.nextDouble();  
  
        System.out.print("Is the product active? (true/false): ");  
  
        tempActive = in.nextBoolean();  
  
  
        Product p1 = new Product(tempNumber, tempName, tempQty, tempPrice, tempActive);  
  
  
        in.nextLine();  
  
        System.out.print("Enter item number: ");  
  
        tempNumber = in.nextInt();  
  
        System.out.print("Enter item name: ");
```

```
in.nextLine();

tempName = in.nextLine();

System.out.print("Enter quantity: ");

tempQty = in.nextInt();

System.out.print("Enter price: ");

tempPrice = in.nextDouble();

System.out.print("Is the product active? (true/false): ");

tempActive = in.nextBoolean();


Product p2 = new Product(tempNumber, tempName, tempQty, tempPrice, tempActive);


System.out.println(p1.toString());

System.out.println(p2.toString());


in.close();

}

}
```

OUTPUT:

```
C:\Users\rishi>cd downloads
```

```
C:\Users\rishi\Downloads>javac ProductTester.java
```

```
C:\Users\rishi\Downloads>java ProductTester
```

```
Enter item number: 19156
```

```
Enter item name: CHAIRS
```

```
Enter quantity: 150
```

```
Enter price: 2890.76
```

```
Is the product active? (true/false): TRUE
```

```
Enter item number: 19157
```

```
Enter item name: ICECREAMS
```

```
Enter quantity: 500
```

```
Enter price: 9006.54
```

```
Is the product active? (true/false): FALSE
```

```
Item Number 19156
```

```
Name : CHAIRS
```

```
Quantity in stock: 150
```

```
Price : 2890.76
```

```
Stock Value : 433614.000000000006
```

```
Product Status : Active
```

```
Item Number 19157
```

```
Name : ICECREAMS
```

```
Quantity in stock: 500
```

```
Price : 9006.54
```

```
Stock Value : 4503270.0
```

```
Product Status : Discontinued
```