```java
1  //FA20-BCE-021
2  //RANA FAHAD AMAN
3
4  public class Product {
5      //Creating instance variables
6      private int productID;
7      private String productName;
8      private double productPrice;
9
10     //Constructor with 2 parameters
11     public Product(int productID, String productName
   ) {
12         setProductID(productID);
13         setProductName(productName);
14     }
15
16     //Fully parameterized constructor
17     public Product(int productID, String productName
   , double productPrice) {
18         setProductID(productID);
19         setProductName(productName);
20         setProductPrice(productPrice);
21     }
22
23     //Creating getter-setters
24     public int getProductID() {
25         return productID;
26     }
27
28     public void setProductID(int productID) {
29         if (productID <= 999)
30             System.out.println("Product ID must be a
   four digit number.\n");
31         else
32             this.productID = productID;
33     }
34
35     public String getProductName() {
36         return productName;
37     }
38
```

```java
39      public void setProductName(String productName) {
40          this.productName = productName;
41      }
42
43      public double getProductPrice() {
44          return productPrice;
45      }
46
47      public void setProductPrice(double productPrice
   ) {
48          if (productPrice <= 0)
49              System.out.println("Product Price must be
    greater than ZERO.");
50          else
51              this.productPrice = productPrice;
52      }
53
54      //Creating a data-displaying method using getters
55      public void displayInformation() {
56          System.out.println("Product Name> " +
   getProductName());
57          System.out.println("Product ID> " +
   getProductID());
58          System.out.println("Product Price> " +
   getProductPrice());
59
60      }
61
62 }
63
```

```java
1  //FA20-BCE-021
2  //RANA FAHAD AMAN
3
4  import java.util.Scanner;
5
6  public class ProductTest {
7      public static void main(String[] args) {
8
9          //Creating a scanner
10         Scanner S1 = new Scanner(System.in);
11         System.out.println("|Product#1|");
12         System.out.println("Enter product Name: ");
13         String b = S1.nextLine();
14         System.out.println("Enter product ID: ");
15         int a = S1.nextInt();
16
17         Product P1 = new Product(a, b);
18         System.out.println("Enter product Price: ");
19         P1.setProductPrice(S1.nextDouble());
20         S1.nextLine();
21
22         System.out.println("|Product#2|");
23         System.out.println("Enter product Name: ");
24         String d = S1.nextLine();
25         System.out.println("Enter product ID: ");
26         int c = S1.nextInt();
27         System.out.println("Enter product Price: ");
28         double e = S1.nextDouble();
29         Product P2 = new Product(c, d, e);
30
31         //Displaying Data
32         System.out.println("|Displaying Data|\n");
33         System.out.println("|Product#1|");
34         P1.displayInformation();
35         System.out.println("\n|Product#2|");
36         P2.displayInformation();
37     }
38 }
39
```

```
 1 C:\Users\hp\.jdks\openjdk-17\bin\java.exe "-javaagent
   :C:\ProgramData\IntelliJ IDEA\IntelliJ IDEA Community
    Edition 2021.2.2\lib\idea_rt.jar=49673:C:\
   ProgramData\IntelliJ IDEA\IntelliJ IDEA Community
   Edition 2021.2.2\bin" -Dfile.encoding=UTF-8 -
   classpath C:\Users\hp\IdeaProjects\Product\out\
   production\Product ProductTest
 2 |Product#1|
 3 Enter product Name:
 4 Apples
 5 Enter product ID:
 6 1000
 7 Enter product Price:
 8 10
 9 |Product#2|
10 Enter product Name:
11 Bananas
12 Enter product ID:
13 1001
14 Enter product Price:
15 20
16 |Displaying Data|
17
18 |Product#1|
19 Product Name> Apples
20 Product ID> 1000
21 Product Price> 10.0
22
23 |Product#2|
24 Product Name> Bananas
25 Product ID> 1001
26 Product Price> 20.0
27
28 Process finished with exit code 0
29
```