

Problem 1 Product Class

```
Product.java :
9      this.id = id;
10     this.name = name;
11     this.price = price;
12 }
13
14 public void displayProduct() {
15     System.out.println("Product details: ");
16     System.out.println("Product ID: " + id);
17     System.out.println("Product Name: " + name);
18     System.out.println("Product Price: $" + price);
19 }
20
```

input

```
Enter Product ID: 9468
Enter Product Name: laptop
Enter Product Price: 50000
Product details:
Product ID: 9468
Product Name: laptop
Product Price: $50000.0

...Program finished with exit code 0
Press ENTER to exit console.
```

Problem 2 Library Management System

```
LibraryManageme... :
1 import java.util.Scanner;
2
3 class Book {
4     protected String title;
5     protected String author;
6
7     public Book(String title, String author) {
8         this.title = title;
9         this.author = author;
10    }
11
12    public void displayDetails() {
13        System.out.println("Title: " + title);
14        System.out.println("Author: " + author);
15    }
16 }
17
18 class Fiction extends Book {
19     public Fiction(String title, String author) {
20         super(title, author);
21     }
22 }
```

input

```
Enter book title: Too good to be true
Enter book author: Prajikta Koli
Enter book type (Fiction/Non-Fiction): Fiction
Title: Too good to be true
Author: Prajikta Koli
Category: Fiction

...Program finished with exit code 0
Press ENTER to exit console.
```

Problem 3 Student Information System

```
44 }
45
46 public class StudentInformationSystem {
47     public static void main(String[] args) {
48         Scanner scanner = new Scanner(System.in);
49
50         System.out.print("Enter Student Name: ");
51         String studentName = scanner.nextLine();
52         System.out.print("Enter Student Age: ");
53         int studentAge = scanner.nextInt();
54         System.out.print("Enter Roll Number: ");
55         int rollNumber = scanner.nextInt();
56         scanner.nextLine();
57
58         Student student = new Student(studentName, studentAge, rollNumber);
59     }
}
```

Current File

input

Enter Student Name: Ananya
Enter Student Age: 21
Enter Roll Number: 14382
Enter Teacher Name: Mayank Sir
Enter Teacher Age: 26
Enter Subject: Java

Student Details:
Student Name: Ananya
Age: 21
Roll Number: 14382

Teacher Details:
Teacher Name: Mayank Sir
Age: 26
Subject: Java