

ASSIGNMENT-3

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ROLL NO.: - RD2215B50
SECTION: - D2215
GROUP: - 2

Q.1. A Canteen owner selling different food items to students and faculty members on daily basis. The mode of payment is either cash or Paytm. But there is no system available to make n weekly or monthly basis. The biggest challenge for the owner is to maintain the sales record.

Ans: -

```
import java.util.ArrayList;
import java.util.Scanner;
import java.io.File;
import java.io.FileWriter;
import java.io.IOException;

public class CanteenSalesRecord {
    private static ArrayList<Sale> sales = new ArrayList<Sale>();
    private static Scanner input = new Scanner(System.in);
    private static String filename = "sales.txt";

    public static void main(String[] args) {
        int choice = 0;
        while (choice != 4) {
            System.out.println("Choose an option:");
            System.out.println("1. Record a sale");
            System.out.println("2. Display all sales");
```

```
System.out.println("3. Save sales to file");
```

```
System.out.println("4. Exit");
```

```
choice = input.nextInt();
```

```
input.nextLine(); // consume the newline character
```

```
switch (choice) {
```

```
    case 1:
```

```
        recordSale();
```

```
        break;
```

```
    case 2:
```

```
        displaySales();
```

```
        break;
```

```
    case 3:
```

```
        saveSalesToFile();
```

```
        break;
```

```
    case 4:
```

```
        System.out.println("Goodbye!");
```

```
        break;
```

```
    default:
```

```
        System.out.println("Invalid choice");
```

```
}
```

```
}
```

```
}
```

```
private static void recordSale() {
```

```
    System.out.println("Enter food item name:");
```

```
    String item = input.nextLine();
```

```
System.out.println("Enter amount paid (cash or Paytm):");
```

```
String payment = input.nextLine();
```

```
Sale sale = new Sale(item, payment);
```

```
sales.add(sale);
```

```
System.out.println("Sale recorded!");
```

```
}
```

```
private static void displaySales() {
```

```
    for (Sale sale : sales) {
```

```
        System.out.println(sale);
```

```
    }
```

```
}
```

```
private static void saveSalesToFile() {
```

```
    try {
```

```
        FileWriter writer = new FileWriter(filename);
```

```
        for (Sale sale : sales) {
```

```
            writer.write(sale.toString() + "\n");
```

```
        }
```

```
        writer.close();
```

```
        System.out.println("Sales saved to file " + filename);
```

```
    } catch (IOException e) {
```

```
        System.out.println("Error saving sales to file " + filename);
```

```
        e.printStackTrace();
```

```
    }
```

```
}
```

```
private static class Sale {  
    private String item;  
    private String payment;  
  
    public Sale(String item, String payment) {  
        this.item = item;  
        this.payment = payment;  
    }  
  
    public String toString() {  
        return item + " - " + payment;  
    }  
}  
}
```

PROBLEMS 12 OUTPUT DEBUG CONSOLE TERMINAL

```
2. Display all sales  
3. Save sales to file  
4. Exit  
1  
Enter food item name:  
mango  
Enter amount paid (cash or Paytm):  
150  
Sale recorded!  
Choose an option:  
1. Record a sale  
2. Display all sales  
3. Save sales to file  
4. Exit  
2  
mango - 150  
Choose an option:  
1. Record a sale  
2. Display all sales  
3. Save sales to file  
4. Exit  
4  
Goodbye!  
CODE\JAVA PROGRAM\ASSIGNMENT>
```