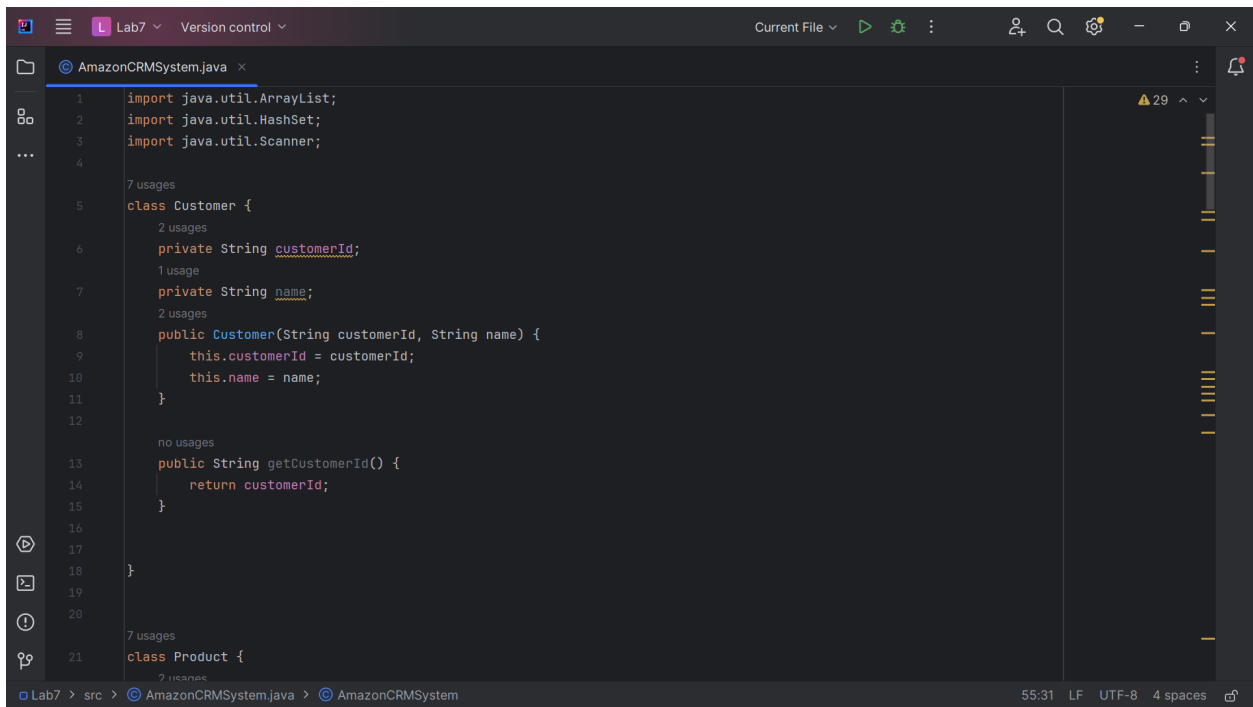
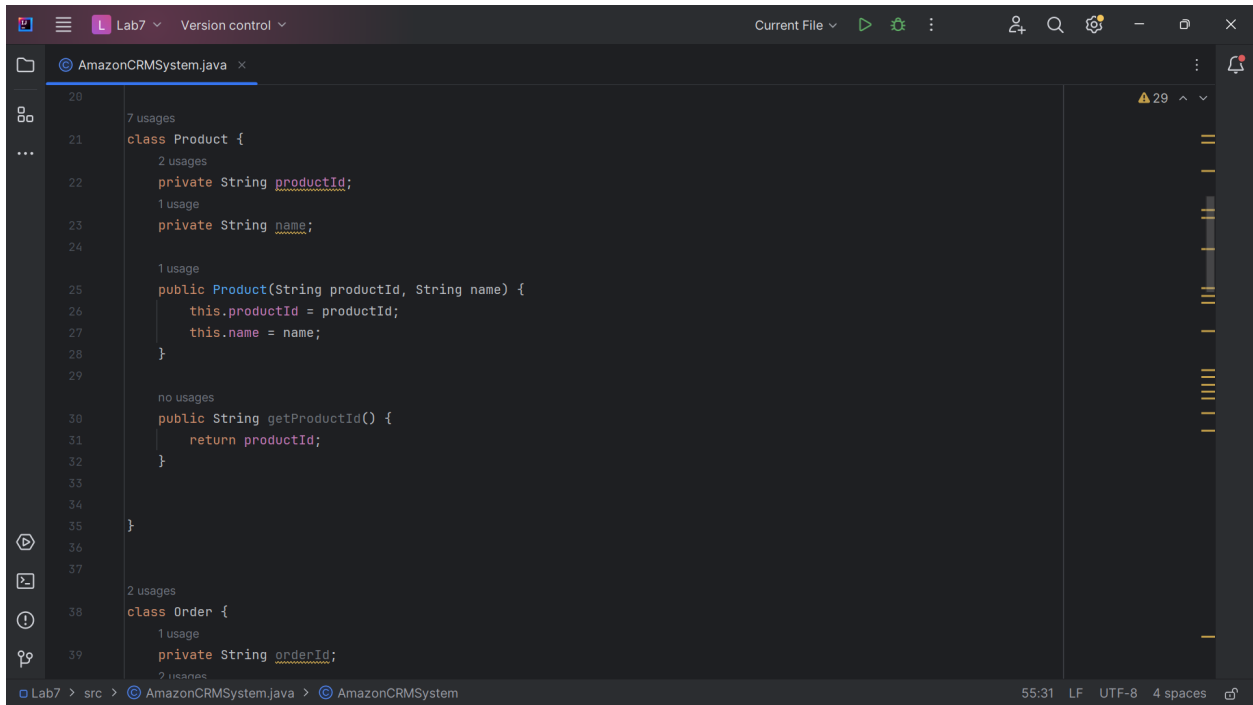


CODE:



The screenshot shows an IDE window titled "AmazonCRMSystem.java". The code defines two classes: `Customer` and `Product`. The `Customer` class has private attributes `customerId` and `name`, a constructor, and a `getCustomerId()` method. The `Product` class is partially visible at the bottom.

```
1  import java.util.ArrayList;
2  import java.util.HashSet;
3  import java.util.Scanner;
4
5  7 usages
6  class Customer {
7      2 usages
8      private String customerId;
9      1 usage
10     private String name;
11     2 usages
12     public Customer(String customerId, String name) {
13         this.customerId = customerId;
14         this.name = name;
15     }
16
17     no usages
18     public String getCustomerId() {
19         return customerId;
20     }
21
22     7 usages
23     class Product {
24         2 usages
```



This screenshot continues the code from the previous one, showing the `Product` class and the start of the `Order` class. The `Product` class has private attributes `productId` and `name`, a constructor, and a `getProductId()` method. The `Order` class has a private attribute `orderId`.

```
20
21 7 usages
22 class Product {
23     2 usages
24     private String productId;
25     1 usage
26     private String name;
27
28     1 usage
29     public Product(String productId, String name) {
30         this.productId = productId;
31         this.name = name;
32     }
33
34     no usages
35     public String getProductId() {
36         return productId;
37     }
38
39     2 usages
40     class Order {
41         1 usage
42         private String orderId;
43         2 usages
```

```
Lab7 Version control Current File
AmazonCRMSys...
class Order {
    1 usage
    private String orderId;
    2 usages
    private Customer customer;
    2 usages
    private ArrayList<Product> products;
    no usages
    public Order(String orderId, Customer customer, ArrayList<Product> products) {
        this.orderId = orderId;
        this.customer = customer;
        this.products = products;
    }
    no usages
    public Customer getCustomer() {
        return customer;
    }
    1 usage
    public ArrayList<Product> getProducts() {
        return products;
    }
}

55 public class AmazonCRMSys...
    1 usage
    private ArrayList<Customer> customers = new ArrayList<>();
    1 usage
    private ArrayList<Product> products = new ArrayList<>();
    29
55:31 LF UTF-8 4 spaces
```

```
Lab7 Version control Current File
AmazonCRMSys...
    1 usage
    private ArrayList<Customer> customers = new ArrayList<>();
    1 usage
    private ArrayList<Product> products = new ArrayList<>();
    1 usage
    private ArrayList<Order> orders = new ArrayList<>();
    2 usages
    private HashSet<Product> uniqueProducts = new HashSet<>();
    2 usages
    public void addCustomer(Customer customer) {
        customers.add(customer);
    }
    1 usage
    public void addProduct(Product product) {
        products.add(product);
        uniqueProducts.add(product);
    }
    no usages
    public void placeOrder(Order order) {
        orders.add(order);
        uniqueProducts.addAll(order.getProducts());
    }
    1 usage
    public void displayMenu() {
        System.out.println("Menu:");
        System.out.println("1. Add User");
        System.out.println("2. Update User details");
    }
    29
55:31 LF UTF-8 4 spaces
```

```
Lab7 ▾ Version control ▾ Current File ▾ 🔍 ⚙️ - □ ×

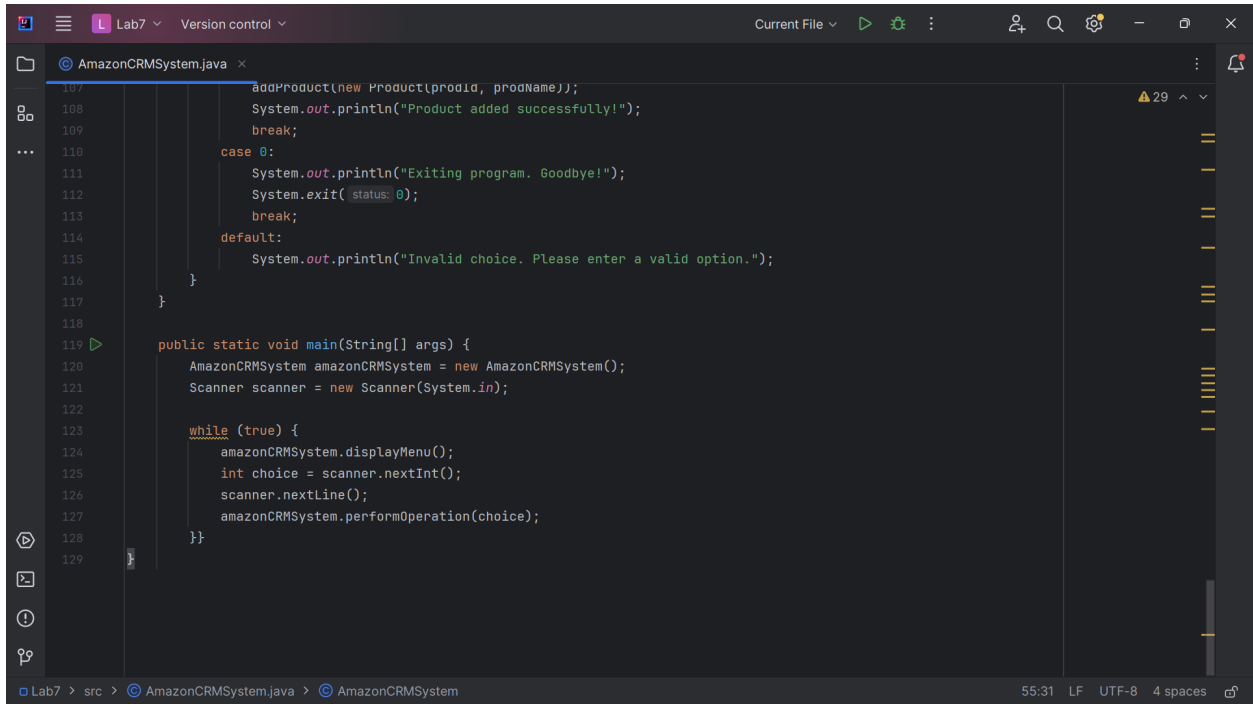
AmazonCRMSystem.java ×
72 public void displayMenu() {
73     System.out.println("Menu:");
74     System.out.println("1. Add User");
75     System.out.println("2. Update User details");
76     System.out.println("3. Add Prod");
77     System.out.println("4. Update Prod");
78     System.out.println("5. Track Order");
79     System.out.println("6. View Order History");
80     System.out.println("0. Exit");
81     System.out.print("Enter your choice: ");
82 }
1 usage
83 public void performOperation(int choice) {
84     Scanner scanner = new Scanner(System.in);
85     switch (choice) {
86     case 1:
87         System.out.print("Enter user ID: ");
88         String userId = scanner.nextLine();
89         System.out.print("Enter user name: ");
90         String userName = scanner.nextLine();
91         addCustomer(new Customer(userId, userName));
92         System.out.println("User added successfully!");
93         break;
94     case 2:
95         System.out.print("Enter user ID to update: ");
96         String userId2 = scanner.nextLine();
97         System.out.print("Enter user name: ");
98         String userName2 = scanner.nextLine();
99         addCustomer(new Customer(userId2, userName2));
100        System.out.println("User added successfully!");
101        break;
102    case 3:
103        System.out.print("Enter product ID: ");
104        String prodId = scanner.nextLine();
105        System.out.print("Enter product name: ");
106        String prodName = scanner.nextLine();
107        addProduct(new Product(prodId, prodName));
108        System.out.println("Product added successfully!");
109        break;
110    case 0:
111        System.out.println("Exiting program. Goodbye!");
112        System.exit(status: 0);
113        break;
114    default:
115        System.out.println("Invalid choice. Please enter a valid option.");
116    }
117 }
118
119 public static void main(String[] args) {
120     AmazonCRMSystem amazonCRMSystem = new AmazonCRMSystem();
121     Scanner scanner = new Scanner(System.in);
122 }
```

Lab7 > src > AmazonCRMSystem.java > AmazonCRMSystem 55:31 LF UTF-8 4 spaces

```
Lab7 ▾ Version control ▾ Current File ▾ 🔍 ⚙️ - □ ×

AmazonCRMSystem.java ×
95     System.out.print("Enter user ID to update: ");
96     String userId2 = scanner.nextLine();
97     System.out.print("Enter user name: ");
98     String userName2 = scanner.nextLine();
99     addCustomer(new Customer(userId2, userName2));
100     System.out.println("User added successfully!");
101     break;
102
103     case 3:
104         System.out.print("Enter product ID: ");
105         String prodId = scanner.nextLine();
106         System.out.print("Enter product name: ");
107         String prodName = scanner.nextLine();
108         addProduct(new Product(prodId, prodName));
109         System.out.println("Product added successfully!");
110         break;
111     case 0:
112         System.out.println("Exiting program. Goodbye!");
113         System.exit(status: 0);
114         break;
115     default:
116         System.out.println("Invalid choice. Please enter a valid option.");
117     }
118 }
119
120 public static void main(String[] args) {
121     AmazonCRMSystem amazonCRMSystem = new AmazonCRMSystem();
122     Scanner scanner = new Scanner(System.in);
123 }
```

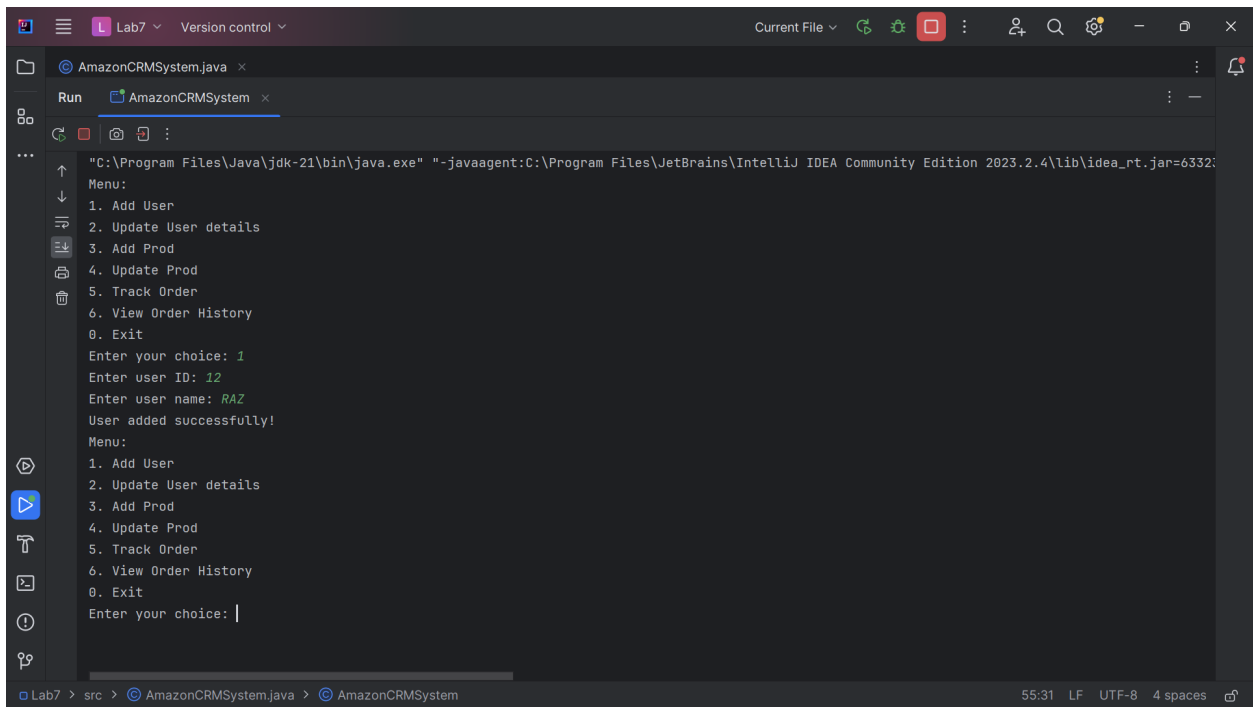
Lab7 > src > AmazonCRMSystem.java > AmazonCRMSystem 55:31 LF UTF-8 4 spaces



```
107         addProduct(new Product(prodid, prodName));
108         System.out.println("Product added successfully!");
109         break;
110     case 0:
111         System.out.println("Exiting program. Goodbye!");
112         System.exit(status 0);
113         break;
114     default:
115         System.out.println("Invalid choice. Please enter a valid option.");
116     }
117 }
118
119 public static void main(String[] args) {
120     AmazonCRMSystem amazonCRMSystem = new AmazonCRMSystem();
121     Scanner scanner = new Scanner(System.in);
122
123     while (true) {
124         amazonCRMSystem.displayMenu();
125         int choice = scanner.nextInt();
126         scanner.nextLine();
127         amazonCRMSystem.performOperation(choice);
128     }
129 }
```

Lab7 > src > AmazonCRMSystem.java > AmazonCRMSystem 55:31 LF UTF-8 4 spaces

## OUTPUT:



```
Run AmazonCRMSystem
"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.4\lib\idea_rt.jar=6332:
Menu:
1. Add User
2. Update User details
3. Add Prod
4. Update Prod
5. Track Order
6. View Order History
0. Exit
Enter your choice: 1
Enter user ID: 12
Enter user name: RAZ
User added successfully!
Menu:
1. Add User
2. Update User details
3. Add Prod
4. Update Prod
5. Track Order
6. View Order History
0. Exit
Enter your choice: |
```

Lab7 > src > AmazonCRMSystem.java > AmazonCRMSystem 55:31 LF UTF-8 4 spaces