



Bansilal Ramnath Agarwal Charitable Trust's
Vishwakarma Institute of Technology
(An Autonomous Institute affiliated to Savitribai Phule Pune University)

Assignment -5

Subject	OOP
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Class	CS-D
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Problem Statement

A fashion E-commerce company keeps a track of all the orders using an **ArrayList** and a class **Order**. Implement class **Order** and retrieve and return the list of items present in all the orders. Implement the logic inside **getItems()** method. Consider true and false value given in input for cash on delivery option.

Test the functionalities using the **main()** method of the **Tester** class.

Sample Input and Output

Sample Input	Expected Output
orders=[Order(101,itemNames=[Jeans, Shirt, Belt],true), Order(102,itemNames=[Tie,Shirt],true),Order(103,itemNames=[Tshirt,Socks,Tie],true)	[Jeans,Shirt,Belt,Tie,Shirt,Tshirt,Socks,Tie]
orders=[Order(311,itemNames=[Sportswear, Dumbbell],true), Order(102,itemNames=[, Jeans],true),Order(103,itemNames=[Smartwatch,Fitnessband,Joggers],true)	Sportswear,Dumbbell,Smartwatch,Fitnessband,Joggers]

Input:

```
import java.util.ArrayList;

class Order {
    private ArrayList<String> itemNames;
    private boolean cashOnDelivery;

    public Order(ArrayList<String> itemNames, boolean cashOnDelivery) {
        this.itemNames = itemNames;
        this.cashOnDelivery = cashOnDelivery;
    }

    public ArrayList<String> getItems() {
        return itemNames;
    }

    public static void main(String[] args) {
        // Create some sample orders
        Order order1 = new Order(new ArrayList<String>() {{
            add("Jeans");
            add("Shirt");
            add("Belt");
        }}, true);

        Order order2 = new Order(new ArrayList<String>() {{
            add("Tie");
            add("Shirt");
        }}, true);

        Order order3 = new Order(new ArrayList<String>() {{
            add("Tshirt");
            add("Socks");
        }});
    }
}
```

```

        add("Tie");
    }}, true);

    Order order4 = new Order(new ArrayList<String>() {{
        add("Sportswear");
        add("Dumbbell");
    }}, true);

    Order order5 = new Order(new ArrayList<String>() {{
        add("Jeans");
    }}, true);

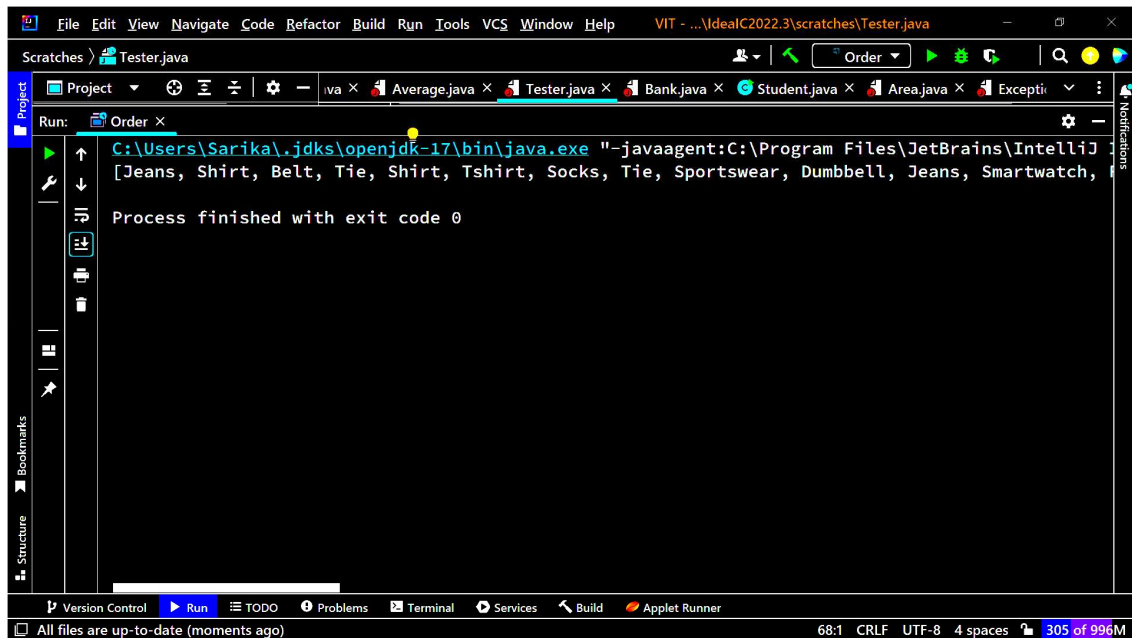
    Order order6 = new Order(new ArrayList<String>() {{
        add("Smartwatch");
        add("Fitnessband");
        add("Joggers");
    }}, true);

    // Add orders to an ArrayList
    ArrayList<Order> orders = new ArrayList<Order>() {{
        add(order1);
        add(order2);
        add(order3);
        add(order4);
        add(order5);
        add(order6);
    }};

    // Retrieve and print the items in all orders
    ArrayList<String> allItems = new ArrayList<String>();
    for (Order order : orders) {
        allItems.addAll(order.getItems());
    }
    System.out.println(allItems);
}

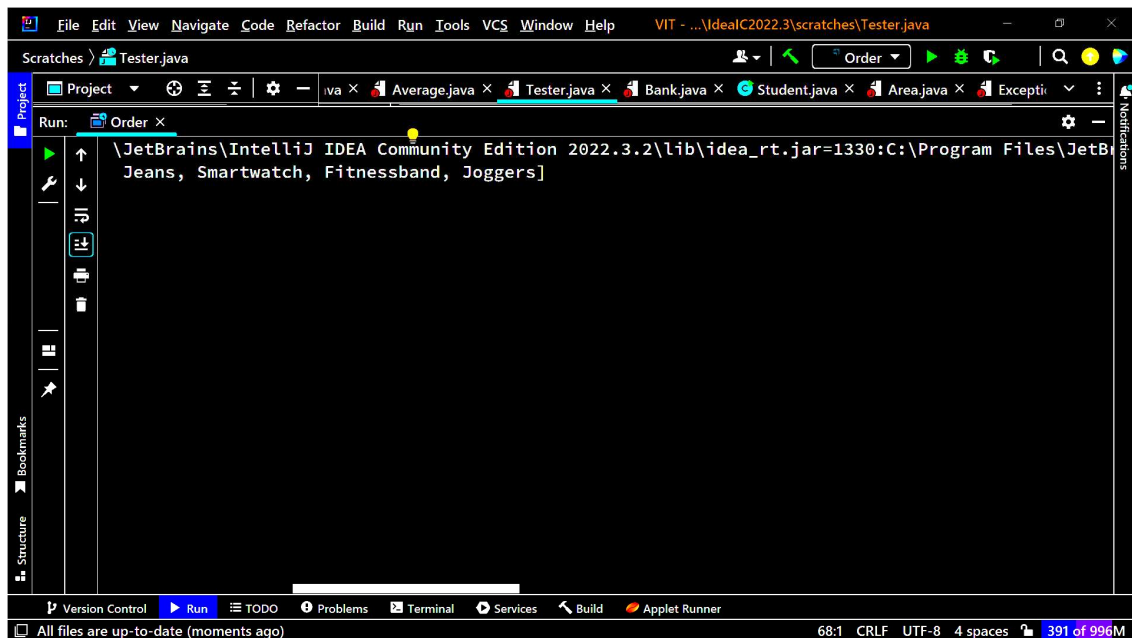
```

Output:



The screenshot shows the IntelliJ IDEA interface with the Run console open. The console displays the command used to run the program: `C:\Users\Sarika\.jdk\openjdk-17\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.3.2\lib\idea_rt.jar=1330:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.3.2\bin" -Dfile.encoding=UTF-8`. Below the command, the output shows the list of items: `[Jeans, Shirt, Belt, Tie, Shirt, Tshirt, Socks, Tie, Sportswear, Dumbbell, Jeans, Smartwatch, Fitnessband, Joggers]`. The console concludes with `Process finished with exit code 0`. The status bar at the bottom indicates that all files are up-to-date and the memory usage is 305 of 996M.

```
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[Jeans, Shirt, Belt, Tie, Shirt, Tshirt, Socks, Tie, Sportswear, Dumbbell, Jeans, Smartwatch, Fitnessband, Joggers]
Process finished with exit code 0
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