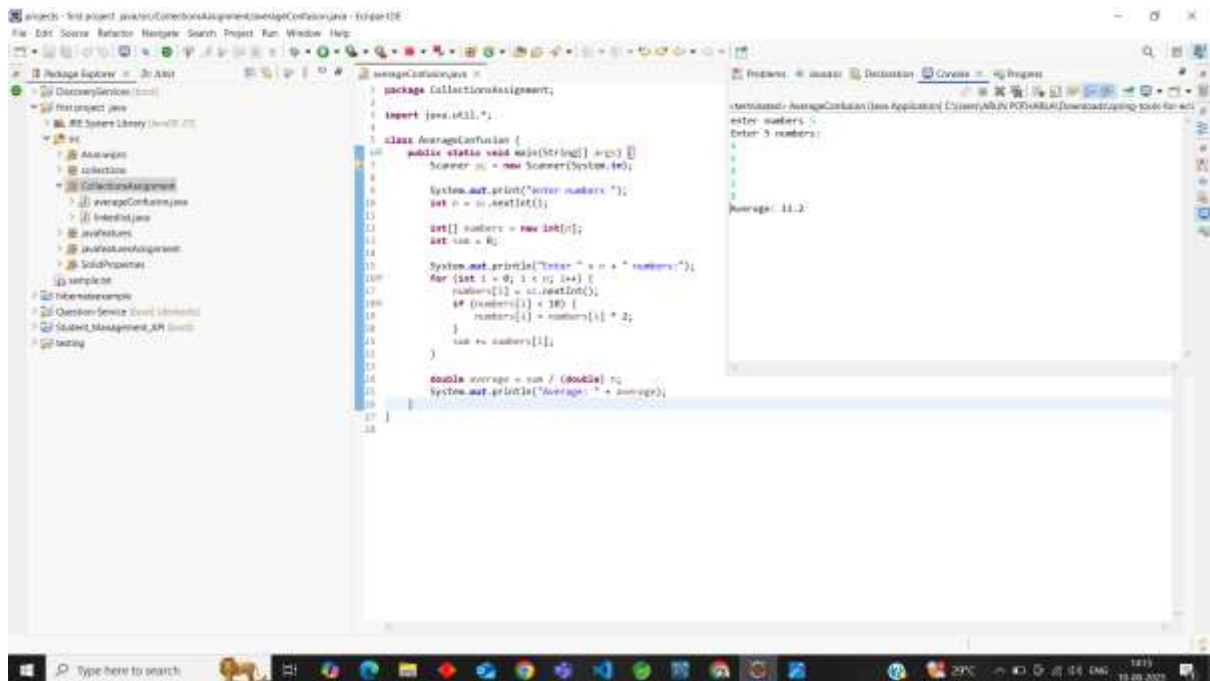


# Collections Assignments

## Average Confusion:



```
package CollectionsAssignment;

import java.util.*;

class AverageConfusion {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter numbers: ");
        int n = sc.nextInt();

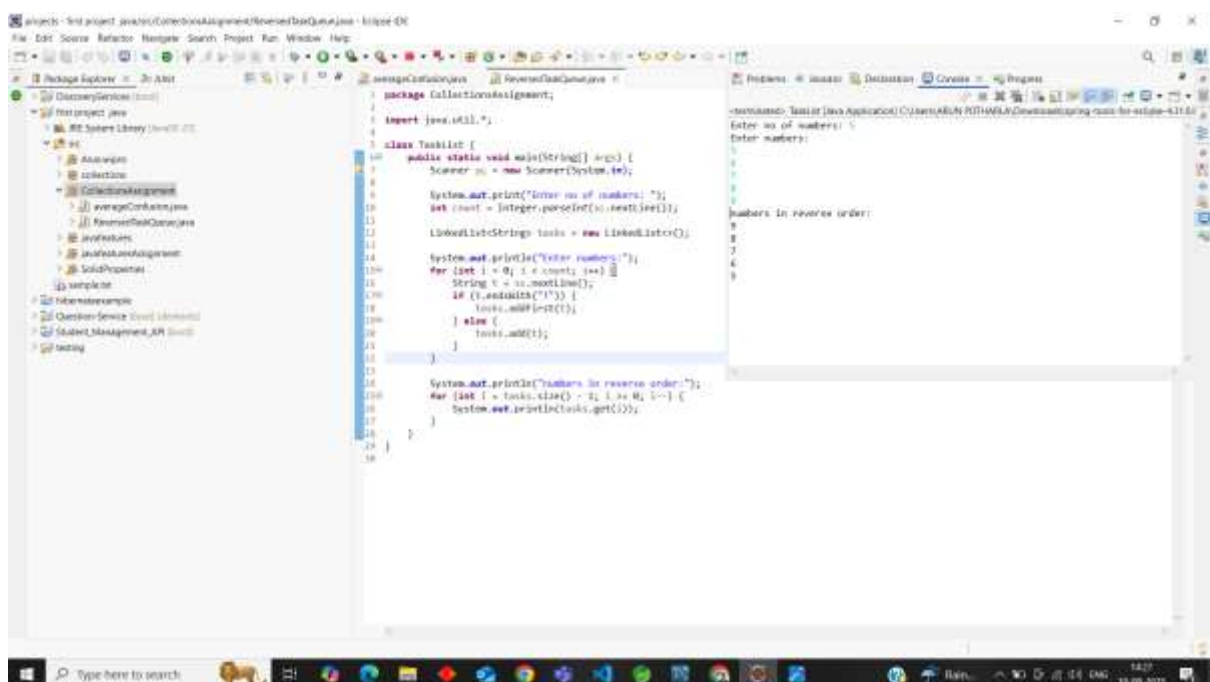
        int[] numbers = new int[n];
        int sum = 0;

        System.out.println("Enter " + n + " numbers:");
        for (int i = 0; i < n; i++) {
            numbers[i] = sc.nextInt();
            if (numbers[i] < 10) {
                numbers[i] = numbers[i] * 2;
            }
            sum += numbers[i];
        }

        double average = sum / (double) n;
        System.out.println("Average: " + average);
    }
}
```

terminated: AverageConfusion [Java Application] C:\Users\ABIN\Downloads\spring-tool-suite-for-act  
Enter numbers: 5  
Enter 5 numbers:  
Average: 11.2

## Reversed Task Queue:



```
package CollectionsAssignment;

import java.util.*;

class TaskList {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter no. of numbers: ");
        int count = Integer.parseInt(sc.nextLine());

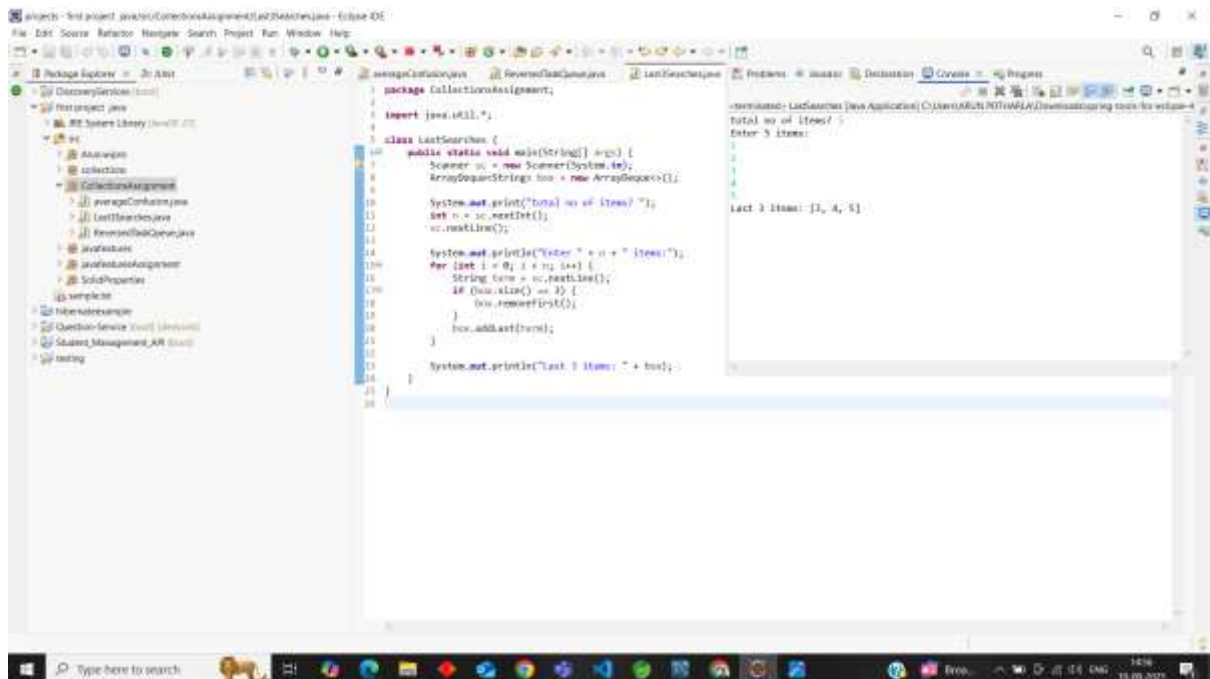
        LinkedList<String> tasks = new LinkedList();

        System.out.println("Enter numbers:");
        for (int i = 0; i < count; i++) {
            String t = sc.nextLine();
            if (t.endsWith("\n")) {
                tasks.add(t);
            } else {
                tasks.add(t);
            }
        }

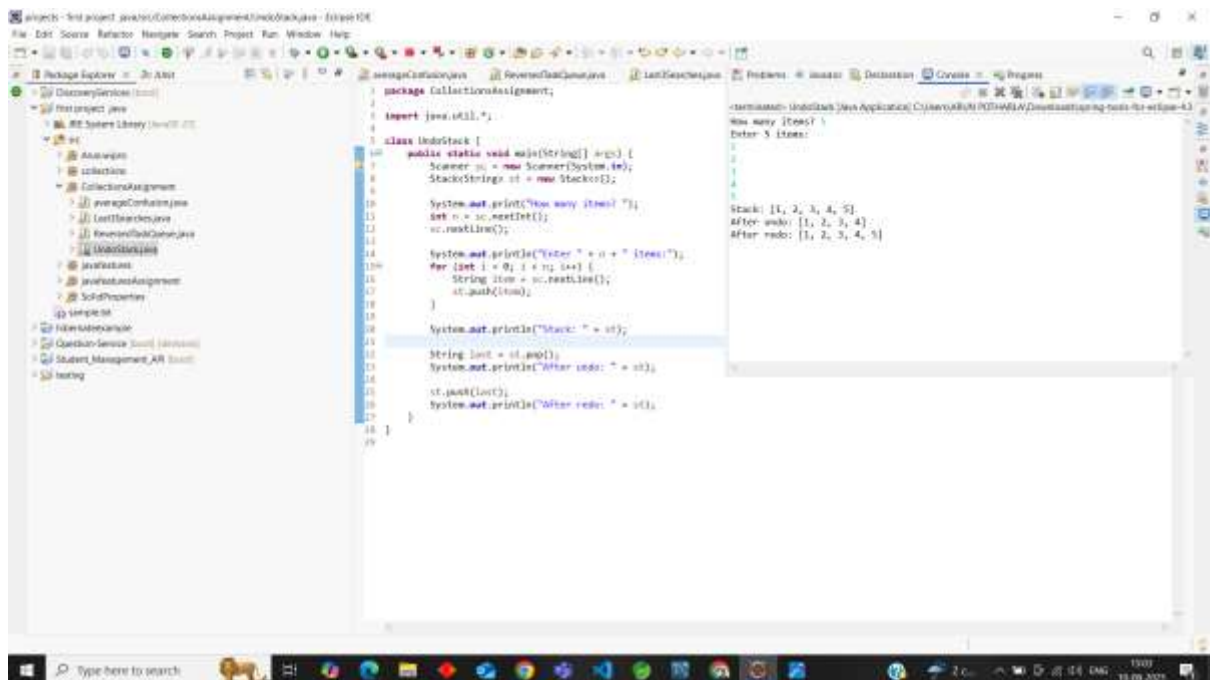
        System.out.println("Numbers in reverse order:");
        for (int i = tasks.size() - 1; i >= 0; i--) {
            System.out.println(tasks.get(i));
        }
    }
}
```

terminated: TaskList [Java Application] C:\Users\ABIN\Downloads\spring-tool-suite-for-act-4.21.0  
Enter no. of numbers: 5  
Enter numbers:  
Numbers in reverse order:  
5  
4  
7  
8  
9

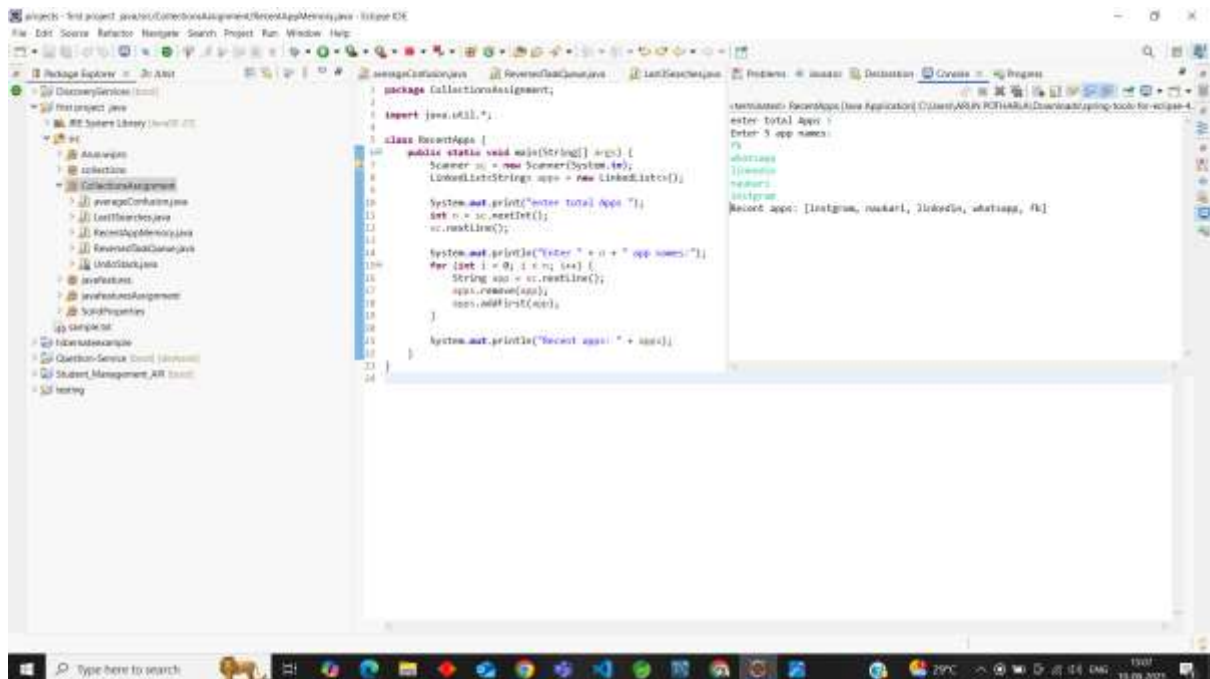
## Last 3 Searches:



## Undo Stack



## Recent App Memory:



```
package CollectionsAssignment;

import java.util.*;

class RecentApp {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        ArrayList<String> apps = new ArrayList<>();

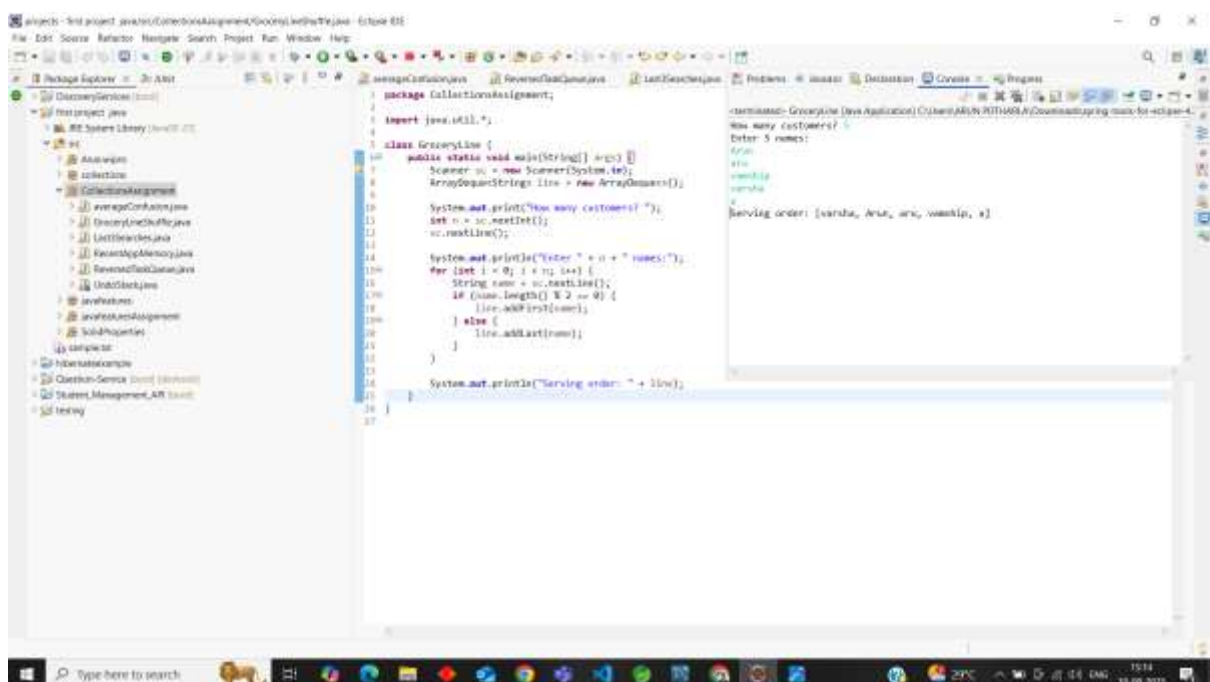
        System.out.println("Enter total Apps ");
        int n = sc.nextInt();
        sc.nextLine();

        System.out.println("Enter " + n + " app names:");
        for (int i = 0; i < n; i++) {
            String app = sc.nextLine();
            apps.add(app);
        }

        System.out.println("Recent apps: " + apps);
    }
}
```

Enter total Apps :  
Enter 5 app names:  
whatsapp  
instagram  
linkedin  
facebook  
gmail  
Recent apps: [instagram, facebook, linkedin, whatsapp, gmail]

## Grocery Line Shuffle



```
package CollectionsAssignment;

import java.util.*;

class GroceryLine {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        ArrayList<String> line = new ArrayList<>();

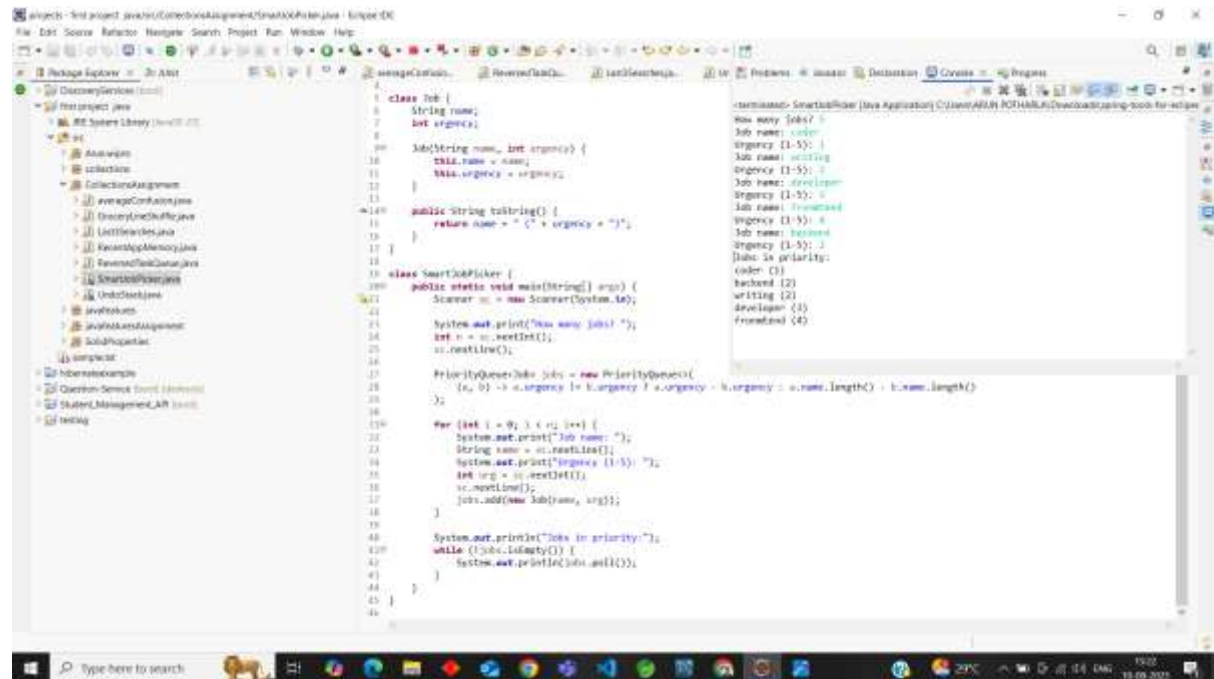
        System.out.println("How many customers? ");
        int n = sc.nextInt();
        sc.nextLine();

        System.out.println("Enter " + n + " names:");
        for (int i = 0; i < n; i++) {
            String name = sc.nextLine();
            if (name.length() % 2 == 0) {
                line.add(name);
            } else {
                line.add(name);
            }
        }

        System.out.println("Serving order: " + line);
    }
}
```

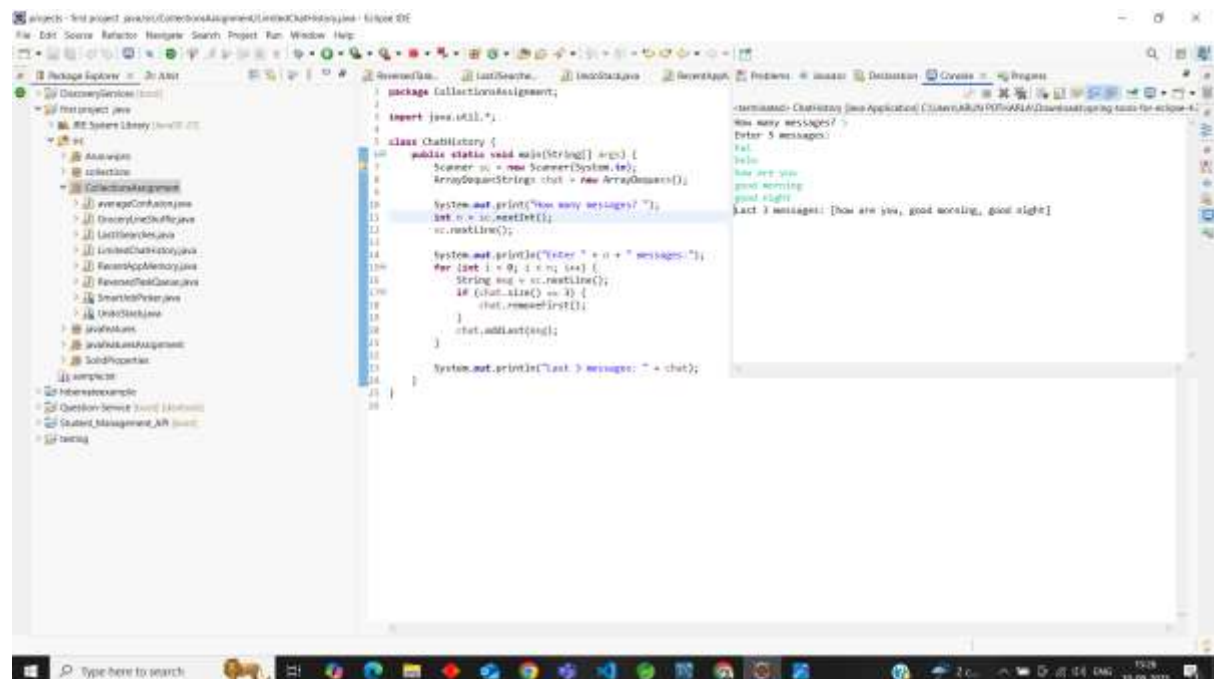
How many customers? :  
Enter 5 names:  
varsha  
Arun  
aru  
wasup  
a  
Serving order: [varsha, Arun, aru, wasup, a]

## Smart Job Picker



```
1 class Job {
2     String name;
3     int agency;
4
5     Job(String name, int agency) {
6         this.name = name;
7         this.agency = agency;
8     }
9
10    public String toString() {
11        return name + " (" + agency + ")";
12    }
13
14    class SmartJobPicker {
15        public static void main(String[] args) {
16            Scanner sc = new Scanner(System.in);
17
18            System.out.print("How many jobs? ");
19            int n = sc.nextInt();
20            sc.nextLine();
21
22            PriorityQueue<Job> jobs = new PriorityQueue<
23                (n, 0) -> a.agency != b.agency ? a.agency - b.agency : a.name.length() - b.name.length()
24            >();
25
26            for (int i = 0; i < n; i++) {
27                System.out.print("Job name: ");
28                String name = sc.nextLine();
29                System.out.print("Agency (1-5): ");
30                int ag = sc.nextInt();
31                sc.nextLine();
32                jobs.add(new Job(name, ag));
33            }
34
35            System.out.println("Jobs in priority:");
36            while (!jobs.isEmpty()) {
37                System.out.println(jobs.poll());
38            }
39        }
40    }
41}
```

## Limited Chat History:



```
1 package CollectionsAssignment;
2
3 import java.util.*;
4
5 class LimitedChatHistory {
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         ArrayList<String> chat = new ArrayList<>();
9
10        System.out.print("How many messages? ");
11        int n = sc.nextInt();
12        sc.nextLine();
13
14        System.out.println("Enter " + n + " messages:");
15        for (int i = 0; i < n; i++) {
16            String msg = sc.nextLine();
17            if (chat.size() == 3) {
18                chat.removeFirst();
19            }
20            chat.addLast(msg);
21        }
22
23        System.out.println("Last 3 messages: " + chat);
24    }
25}
```

# Print Manager

