

```
Books.java
1- import java.util.Stack;
2- import java.util.Scanner;
3- public class Books {
4-     public static void main(String args[]) {
5-
6-         Stack<String> oldShelf = new Stack<>();
7-         Stack<String> newShelf = new Stack<>();
8-         Scanner scanner = new Scanner(System.in);
9-
10-        System.out.print("Enter number of books in old shelf: ");
11-        int books = scanner.nextInt();
12-        scanner.nextLine();
13-
14-        for (int i = 0; i < books; i++) {
15-            System.out.print("Enter book name: ");
16-            String book = scanner.nextLine();
17-            oldShelf.push(book);
18-        }
19-
20-        while (!oldShelf.isEmpty()) {
21-            String currentBook = oldShelf.pop();
22-
23-            System.out.print("Is \"" + currentBook + "\" damaged? (yes/no): ");
24-            String answer = scanner.nextLine();
25-
26-            if (!answer.equalsIgnoreCase("yes")) {
27-                newShelf.push(currentBook);
28-            }
29-        }
30-
31-        System.out.println("\n Books in new shelf (LIFO order):");
32-        while (!newShelf.isEmpty()) {
33-            System.out.println(newShelf.pop());
34-        }
35-    }
}
```

Output

```
Enter number of books in old shelf: 3
Enter book name: Aaaa
Enter book name: Bbbb
Enter book name: Cccc
Is "Cccc" damaged? (yes/no): no
Is "Bbbb" damaged? (yes/no): yes
Is "Aaaa" damaged? (yes/no): no

Books in new shelf (LIFO order):
Aaaa
Cccc

=== Code Execution Successful ===
```

Main.java



Share

Run

Output

Clear

```
1 import java.util.*;
2
3 public class Job{
4     public static void main(String args[]) {
5         Queue<String> jobs = new LinkedList<>();
6         Scanner scanner = new Scanner(System.in);
7         final int MAX = 3;
8
9         while (true) {
10             System.out.println("\n 1. Add Job 2. Remove Job 3. View Jobs 4. Exit");
11             int choice = scanner.nextInt();
12             scanner.nextLine();
13
14             if (choice == 1) {
15                 if (jobs.size() < MAX) {
16                     System.out.print("Enter job name: ");
17                     jobs.add(scanner.nextLine());
18                 } else
19                     System.out.println("PRINTJOB IS FULL. CANNOT ADD ANY MORE.");
20             }
21             else if (choice == 2) {
22                 if (!jobs.isEmpty())
23                     System.out.println("Removed: " + jobs.poll());
24                 else
25                     System.out.println("PRINT JOB IS EMPTY.");
26             }
27             else if (choice == 3) {
28                 System.out.println(jobs.isEmpty() ? "No jobs." : jobs);
29             }
30             else if (choice == 4){
31                 break;
32             }
33             else {
34                 System.out.println("Invalid choice.");
35             }
36         }
37     }
38 }
```

```
1. Add Job 2. Remove Job 3. View Jobs 4. Exit
1
Enter job name: aaaa

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
1
Enter job name: bbb

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
1
Enter job name: ccc

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
3
[aaaa, bbb, ccc]

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
2
Removed: aaaa

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
3
[bbb, ccc]

1. Add Job 2. Remove Job 3. View Jobs 4. Exit
4

=== Code Execution Successful ===
```

```
1 - import java.util.*;
2
3 - public class School {
4
5 -     public static void main(String args[]) {
6         Scanner scanner = new Scanner(System.in);
7
8         Deque<Integer> line = new ArrayDeque<>();
9         int MAX = 5;
10
11         while (true) {
12             System.out.println("\n1. Join Rear\n2. Join Front\n3. Front Delete\n4. Rear Delete\n5. Print Line\n6. Exit");
13             System.out.print("Enter your choice: ");
14             int choice = scanner.nextInt();
15
16             switch (choice) {
17
18                 case 1:
19                     if (line.size() < MAX) {
20                         System.out.print("Enter Roll No: ");
21                         int roll = scanner.nextInt();
22                         line.addLast(roll);
23                         System.out.println("Student " + roll + " joined at rear.");
24                     } else {
25                         System.out.println("THE LINE IS OVERLOADING");
26                     }
27                     break;
28
29                 case 2:
30                     if (line.size() < MAX) {
31                         System.out.print("Enter Roll No: ");
32                         int roll = scanner.nextInt();
33                         line.addFirst(roll);
34                         System.out.println("Student " + roll + " joined at front.");
35                     } else {
36                         System.out.println("THE LINE IS OVERLOADING");
37                     }
38                     break;
39
40                 case 3:
41                     if (!line.isEmpty()) {
42                         System.out.println("Student " + line.removeFirst() + " left from front.");
43                     } else {
44                         System.out.println("THE LINE IS EMPTY");
45                     }
46                     break;
47
48                 case 4:
49                     if (!line.isEmpty()) {
```

Output

1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 1  
Enter Roll No: 11  
Student 11 joined at rear.

1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 1  
Enter Roll No: 22  
Student 22 joined at rear.

1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 1  
Enter Roll No: 66  
Student 66 joined at rear.

1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 1  
Enter Roll No: 88  
Student 88 joined at rear.

1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 2  
Enter Roll No: 99

```
26  
27     break;  
28  
29     case 2:  
30         if (line.size() < MAX) {  
31             System.out.print("Enter Roll No: ");  
32             int roll = scanner.nextInt();  
33             line.addFirst(roll);  
34             System.out.println("Student " + roll + " joined at front.");  
35         } else {  
36             System.out.println("THE LINE IS OVERLOADING");  
37         }  
38         break;  
39  
40     case 3:  
41         if (!line.isEmpty()) {  
42             System.out.println("Student " + line.removeFirst() + " left from front.");  
43         } else {  
44             System.out.println("THE LINE IS EMPTY");  
45         }  
46         break;  
47  
48     case 4:  
49         if (!line.isEmpty()) {  
50             System.out.println("Student " + line.removeLast() + " left from rear.");  
51         } else {  
52             System.out.println("THE LINE IS EMPTY");  
53         }  
54         break;  
55  
56     case 5:  
57         if (line.isEmpty()) {  
58             System.out.println("No students in line.");  
59         } else {  
60             System.out.println("Current line: " + line);  
61         }  
62         break;  
63  
64     case 6:  
65         System.out.println("Exiting...");  
66         return;  
67  
68     default:  
69         System.out.println("Invalid choice.");  
70 }  
71 }  
72 }  
73 }  
74 }
```

Share

Run

Output

Clear

```
Enter your choice: 2  
THE LINE IS OVERLOADING  
  
1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 3  
Current line: [99, 11, 22, 66, 88]  
  
1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 3  
Student 99 left from front.  
  
1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 4  
Student 88 left from rear.  
  
1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 5  
Current line: [11, 22, 66]  
  
1. Join Rear  
2. Join Front  
3. Front Delete  
4. Rear Delete  
5. Print Line  
6. Exit  
Enter your choice: 6  
Exiting...  
  
--- Code Execution Successful ---
```