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Enrollment number - 21162101012

Branch - CBA , Batch - 31

OOP Practical 20

Problem : Rajiv was assigned a task to structure the data using a Queue interface wherein he was asked to structure the programming subjects semester wise within the queue followed by retrieval of the head element of the queue. Remove the two heads of the queue and add an element as 'Semester 6: Pascal' into the queue. Display the overall list of elements present within the queue.

Program :

```
package Hare_Krishna;

import java.util.LinkedList;
import java.util.Queue;
import java.util.Scanner;

public class Prac_20
{
    static public void main(String... s)
    {
        Scanner sc = new Scanner(System.in);
        Queue<String> q = new LinkedList<>();
        for (int i = 0; i < 5; i++) {
            q.add(sc.nextLine());
        }
    }
}
```

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

q.remove();

q.remove();

q.add("Semester 6: Pascal");

System.out.println(q);

}

}
```

Output :

```
package Hare_Krishna;

import java.util.LinkedList;
import java.util.Queue;
import java.util.Scanner;

public class Prac_20
{
    static public void main(String... s)
    {
        Scanner sc = new Scanner(System.in);
        Queue<String> q = new LinkedList<>();
        for (int i = 0; i < 5; i++) {
            q.add(sc.nextLine());
        }
        System.out.println(q);
        q.remove();
        q.remove();
        q.add("Semester 6: Pascal");
        System.out.println(q);
    }
}
```

Run: Prac_20

```
/usr/lib/jvm/default/bin/java
-javaagent:/usr/share/idea/lib/idea_rt
-jar=35899:/usr/share/idea/bin -Dfile.encoding=UTF-8
-classpath /home/yash/Documents/sem3practicals/OOP
/Hare_Krishna/bin/production/Hare_Krishna:/home/yash/
.m2/repository/org/jetbrains/kotlin/kotlin-stdlib-jdk8/1.7
.10/kotlin-stdlib-jdk8-1.7.10.jar:/home/yash/
.m2/repository/org/jetbrains/kotlin/kotlin-stdlib/1.7
.10/kotlin-stdlib-1.7.10.jar:/home/yash/
.m2/repository/org/jetbrains/kotlin/kotlin-stdlib-common/1
.7.10/kotlin-stdlib-common-1.7.10.jar:/home/yash/
.m2/repository/org/jetbrains/annotations/13
.0/annotations-13.0.jar:/home/yash/
.m2/repository/org/jetbrains/kotlin/kotlin-stdlib-jdk7/1.7
.10/kotlin-stdlib-jdk7-1.7.10
.jar:/home/yash/Documents/sem3practicals/OOP/Hare_Krishna
/mariadb-java-client-3.1.0.jar Hare_Krishna.Prac_20

Semester 1 : C
Semester 2 : C++
Semester 3 : Java
Semester 4 : Python
Semester 5 : Advanced Java
[Semester 1 : C, Semester 2 : C++, Semester 3 : Java,
Semester 4 : Python, Semester 5 : Advanced Java]
[Semester 3 : Java, Semester 4 : Python, Semester 5 :
Advanced Java, Semester 6: Pascal]

Process finished with exit code 0
```