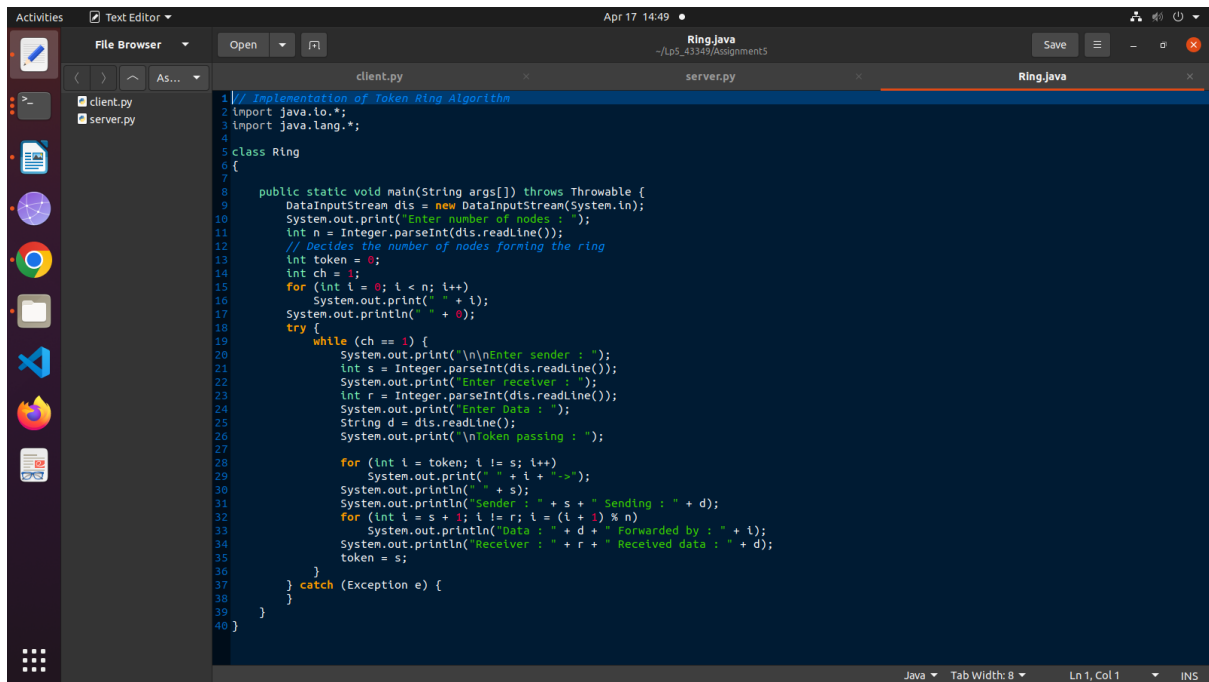


# Assignment 5

Code-

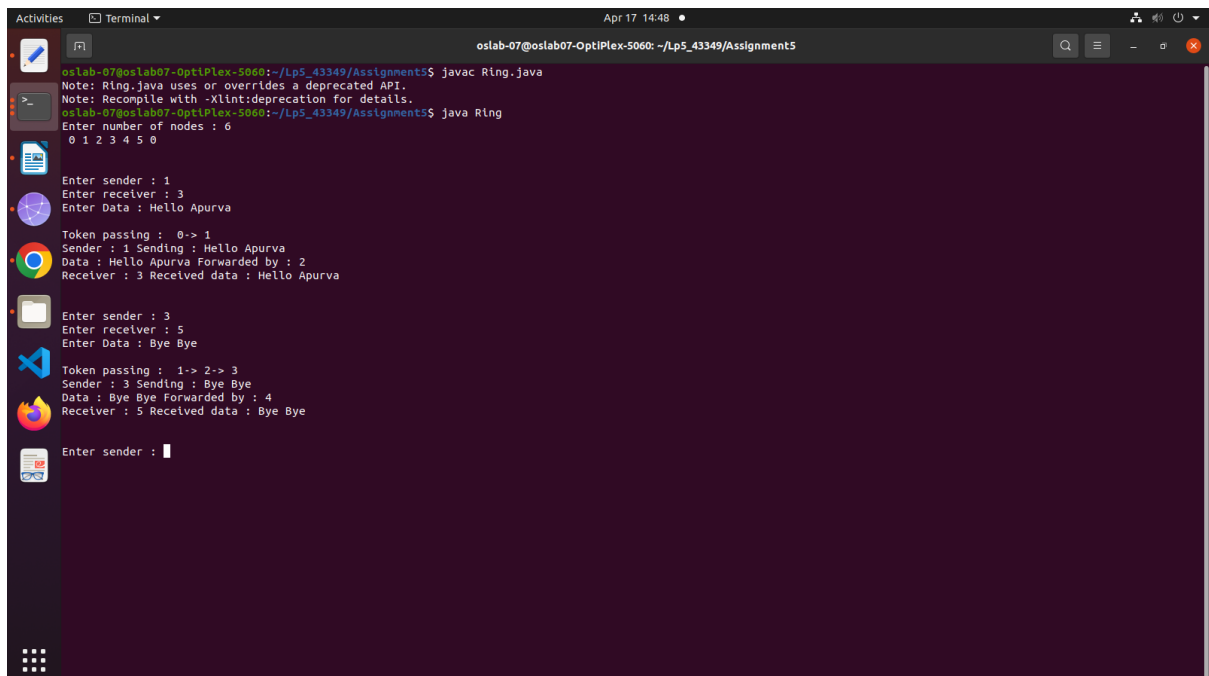


```

1 // Implementation of Token Ring Algorithm
2 import java.io.*;
3 import java.lang.*;
4
5 class Ring
6 {
7
8     public static void main(String args[]) throws Throwable {
9         DataInputStream dis = new DataInputStream(System.in);
10        System.out.print("Enter number of nodes : ");
11        int n = Integer.parseInt(dis.readLine());
12        // Decides the number of nodes forming the ring
13        int token = 0;
14        int ch = 1;
15        for (int i = 0; i < n; i++)
16            System.out.print(" " + i);
17        System.out.println(" " + 0);
18        try {
19            while (ch == 1) {
20                System.out.print("\nEnter sender : ");
21                int s = Integer.parseInt(dis.readLine());
22                System.out.print("Enter receiver : ");
23                int r = Integer.parseInt(dis.readLine());
24                System.out.print("Enter Data : ");
25                String d = dis.readLine();
26                System.out.print("\ntoken passing : ");
27
28                for (int i = token; i != s; i++)
29                    System.out.print(" " + i + ">");
30                System.out.println(" " + s);
31                System.out.println("Sender : " + s + " Sending : " + d);
32                for (int i = s + 1; i != r; i = (i + 1) % n)
33                    System.out.println("Data : " + d + " Forwarded by : " + i);
34                System.out.println("Receiver : " + r + " Received data : " + d);
35                token = s;
36            }
37        } catch (Exception e) {
38        }
39    }
40 }

```

Output-



```

oslab-07@oslab07-OptiPlex-5060:~/Lp5_43349/Assignment5$ javac Ring.java
Note: Ring.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
oslab-07@oslab07-OptiPlex-5060:~/Lp5_43349/Assignment5$ java Ring
Enter number of nodes : 6
0 1 2 3 4 5 0
Enter sender : 1
Enter receiver : 3
Enter Data : Hello Apurva
Token passing : 0-> 1
Sender : 1 Sending : Hello Apurva
Data : Hello Apurva Forwarded by : 2
Receiver : 3 Received data : Hello Apurva
Enter sender : 3
Enter receiver : 5
Enter Data : Bye Bye
Token passing : 1-> 2-> 3
Sender : 3 Sending : Bye Bye
Data : Bye Bye Forwarded by : 4
Receiver : 5 Received data : Bye Bye
Enter sender : 

```