Code TokenRing:

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

```
37
               System.out.println(" " + s);
38
39
               System.out.println("Sender " + s + " sending data: " + d);
40
41
42
               for (int i=s+1; i != r; i=(i+1)%n)
                   System.out.println("data " + d + " forwarded by " +
43
  i);
               System.out.println("Receiver " + r + " received data: " +
44
  d);
45
               token = s;
           }
46
47
48
      } catch (Exception e) {}
49
50 }
51 }
```

Output:

```
akashkulkarni@akash-kulkarni: ~/College/SEM8/LP5/Assn-5
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akashkulkarni@akash-kulkarni:~/College/SEM8/LP5/Assn-5$ ls
TokenRing.java
akashkulkarni@akash-kulkarni:~/College/SEM8/LP5/Assn-5$ javac TokenRing.java
Note: TokenRing.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
akashkulkarni@akash-kulkarni:~/College/SEM8/LP5/Assn-5$ java TokenRing
Enter the num of nodes:
0 1 2 3 0
Enter sender :
Enter receiver :
Enter Data:
password
Token passing:
0-> 1-> 2
Sender 2 sending data: password
Receiver 3 received data: password
```