

Program:

```
import java.util.*;
public class TokenRing{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner (System.in);
        System.out.println("Enter the message: ");
        String message = sc.nextLine();
        System.out.println("Enter number of processes: ");
        int n=sc.nextInt();
        System.out.println("The processes are: ");
        for(int i=1;i<=n;i++)
        {
            System.out.print(i + " ");
        }
        System.out.println("1" + "\n");
        System.out.println("Enter the sender: ");
        int sender = sc.nextInt();
        System.out.println("Enter the receiver: ");
        int receiver = sc.nextInt();
        for (int i=1;i<=n;i++)
        {
            if(i== sender)
            {
                System.out.println("Sender process-> " + sender);
                System.out.println("The token is received by the sender");
                System.out.println("The message to be sent: " + message);
                break;
            }
        }
        for (int i=sender+1 ; i<=n ; i= (i%n)+1)
        {
            if(i== receiver)
            {
                System.out.println("\nReceiver process-> " + receiver);
                System.out.println("The message is received : " + message);
                break;
            }
        }
    }
}
```

Output

```
C:\Users\payal\Downloads\DS_Lab\DS5>javac TokenRing.java
C:\Users\payal\Downloads\DS_Lab\DS5>java TokenRing
Enter the message:
Hello Krishna Pensalwar
Enter number of processes:
5
The processes are:
1 2 3 4 5 1
Enter the sender:
1
Enter the receiver:
3
Sender process-> 1
The token is received by the sender
The message to be sent: Hello Krishna Pensalwar

Receiver process-> 3
The message is received : Hello Krishna Pensalwar

C:\Users\payal\Downloads\DS_Lab\DS5>_
```