```
import java.io.*;
import java.util.*;

class tokenring {

    public static void main(String args[]) throws Throwable {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the num of nodes:");
        int n = scan.nextInt();
        int m = n - 1;
        // Decides the number of nodes forming the ring
        int token = 0;
        int ch = 0, flag = 0;
        for (int i = 0; i < n; i++) {
            System.out.print(" " + i);
        }
        System.out.println(" " + 0);
        do{
            System.out.println("Enter sender:");
            int s = scan.nextInt();
            System.out.println("Enter receiver:");
            int r = scan.nextInt();
            System.out.println("Enter Data:");
            int a;
```

```
a = scan.nextInt();
System.out.print("Token passing:");
for (int i = token, j = token; (i % n) != s; i++, j = (j + 1) % n) {
   System.out.print(" " + j + "->");
}
System.out.println(" " + s);
System.out.println("Sender " + s + " sending data: " + a);
for (int i = s + 1; i != r; i = (i + 1) % n) {
   System.out.println("data  " + a + " forwarded by " + i);
}
System.out.println("Receiver " + r + " received data: " + a +"\n");
token = s;
do{
   try {
      if( flag == 1)
                  System.out.print("Invalid Input!!...");
      System.out.print("Do you want to send again?? enter 1 for Yes and 0 for No : ");
      ch = scan.nextInt();
      if( ch != 1 && ch != 0 )
                  flag = 1;
      else
                  flag = 0;
   } catch (InputMismatchException e){
      System.out.println("Invalid Input");
   }
```

```
        }while( ch != 1 && ch != 0 );
    }while( ch == 1 );
  }
}
```