```
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 );

}

}
```

OUTPUT: