

```

//tokenring.java

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 );

}

}

```

COMMANDS:

Practical 5

Terminal 1

```
javac tokenring.java
```

```
java tokenring
```

```
enter no.of nodes-3
```

```
enter sender-1
```

```
enter receiver-2
```

```
enter data-4
```

```
yes-1
```

```
enter sender-2
```

```
enter receiver-1
```

```
enter data-5
```

```
N0-0
```