**Assignment 5(Youtube)**

// 5 ) Implement token ring algorithm for mutal exclusion

import java.util.\*;

public class TokenRing{

    public static void main(String[] args){

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter no of nodees in ring ");

        int n = sc.nextInt();

        System.out.println("Ring formed as below");

        for (int i = 0; i<n; i++){

            System.out.print(i + " ");

        }

        System.out.println("0");

        int choice = 0;

        do{

                System.out.print("Enter Sender: ");

                int sender = sc.nextInt();

                System.out.print("Enter Receiver: ");

                int receiver = sc.nextInt();

                System.out.print("Enter Data ");

                int data = sc.nextInt();

                int token = 0;

                System.out.println("Token passing");

                for(int i =token; i<sender; i++){

                    System.out.print(" " + i + " -->" );

                }

                System.out.println(" " + sender);

            System.out.println("sender " + sender + " Sending data " + data);

                for(int i = sender; i!= receiver; i = (i+1)%n){

            System.out.println(" data " + data + " forwarded by " + i);

                }

     System.out.println(" receiver " + receiver + " received data " + data);

                token = sender;

  System.out.print("do you want to contiune if yes enter 1 if no enter 0: " );

                choice = sc.nextInt();

        }while(choice == 1);

    }

}

For Output:

javac TokenRing.java

java TokenRing