

Code

Bully.java

```
import java.io.*;
import java.util.Scanner;
class Bully{
    static int n;
    static int pro[] = new int[100];
    static int sta[] = new int[100];
    static int co;
    public static void main(String args[])throws IOException
    {
        System.out.println("Enter the number of process");
        Scanner in = new Scanner(System.in);
        n = in.nextInt();

        int i,j,k,l,m;

        for(i=0;i<n;i++)
        {
            System.out.println("For process "+(i+1)+":");
            System.out.println("Status:");
            sta[i]=in.nextInt();
            System.out.println("Priority");
            pro[i] = in.nextInt();
        }

        System.out.println("Which process will initiate election?");
        int ele = in.nextInt();

        elect(ele);
        System.out.println("Final coordinator is "+co);
    }

    static void elect(int ele)
    {
        ele = ele-1;
        co = ele+1;
        for(int i=0;i<n;i++)
        {
            if(pro[ele]<pro[i])
            {
                System.out.println("Election message is sent from "+(ele+1)+" to "+(i+1));
                if(sta[i]==1)
                    elect(i+1);
            }
        }
    }
}
```

Output

```
slowgamer@adnan-System-Product-Name:~/Desktop/College/sem8/DC/exp_5$ javac Bully.java
slowgamer@adnan-System-Product-Name:~/Desktop/College/sem8/DC/exp_5$ java Bully
Enter the number of process
5
For process 1:
Status:
0
Priority
2
For process 2:
Status:
1
Priority
1
For process 3:
Status:
1
Priority
2
For process 4:
Status:
0
Priority
0
For process 5:
Status:
1
Priority
5
Which process will initiate election?
2
Election message is sent from 2 to 1
Election message is sent from 2 to 3
Election message is sent from 3 to 5
Election message is sent from 2 to 5
Final coordinator is 5
```