**Group : B**

**Assignment No. : 8.1**

**Title : Write a program to implement FCFS**

**Roll No. : 2365**

**-------------------------------------------------------------------------------------------**

import java.util.\*;

public class FCFS

{

public static void main(String args[])

{

Scanner scan=new Scanner(System.in);

System.out.print("\nEnter Total No. of cyclinders:");

int cyclinders=scan.nextInt();

System.out.print("\nEnter No. of Positions of Head:");

int positions=scan.nextInt();

System.out.println("Enter Work Queue:");

int workqueue[]=new int[positions];

for(int i=0;i<positions;i++)

{

workqueue[i]=scan.nextInt();

}

System.out.print("\nEnter position of Head:");

int position=scan.nextInt();

int headmove[]=new int[positions];

for(int i=0;i<positions;i++)

{

if(workqueue[i]<cyclinders && i==0)

if(position<workqueue[i])

headmove[i]=workqueue[i]-position;

else

headmove[i]=position-workqueue[i];

else

if(workqueue[i]<cyclinders)

if(workqueue[i]>workqueue[i-1])

headmove[i]=workqueue[i]-workqueue[i-1];

else

headmove[i]=workqueue[i-1]-workqueue[i];

}

int totalheadmove=0;

System.out.println("\nHead Moves::");

for(int i=0;i<positions;i++)

{

totalheadmove=totalheadmove+headmove[i];

}

System.out.println("Total Head Move:"+totalheadmove);

for(int i=0;i<positions;i++)

{

if(i==0)

System.out.println(""+position+"->"+workqueue[i]+":"+headmove[i]);

else

System.out.println(""+workqueue[i-1]+"->"+workqueue[i]+":"+headmove[i]);

}

}

}

/\*

Enter Total No. of cyclinders:200

Enter No. of Positions of Head:7

Enter Work Queue:

125

100

175

51

133

8

140

Enter position of Head:125

Head Moves::

Total Head Move:563

125->125:0

125->100:25

100->175:75

175->51:124

51->133:82

133->8:125

8->140:132

\*/