/\* Problem Statement: Write a JAVA program (using oop features) to implement following

1. FCFS

2. SJF(Preemptive)

3. Priority(Non- Preemptive)

4. Round Robin(Preemptive)

1.FCFS

\*/

import java.io.\*;

import java.util.Scanner;

public class FCFS

{

public static void main(String args[])

{

int i,no\_p,burst\_time[],TT[],WT[];

float avg\_wait=0,avg\_TT=0;

burst\_time=new int[50];

TT=new int[50];

WT=new int[50];

WT[0]=0;

Scanner s=new Scanner(System.in);

System.out.println("Enter the number of process: ");

no\_p=s.nextInt();

System.out.println("\nEnter Burst Time for processes:");

for(i=0;i<no\_p;i++)

{

System.out.print("\tP"+(i+1)+": ");

burst\_time[i]=s.nextInt();

}

for(i=1;i<no\_p;i++)

{

WT[i]=WT[i-1]+burst\_time[i-1];

avg\_wait+=WT[i];

}

avg\_wait/=no\_p;

for(i=0;i<no\_p;i++)

{

TT[i]=WT[i]+burst\_time[i];

avg\_TT+=TT[i];

}

avg\_TT/=no\_p;

System.out.println("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println("\tProcesses:");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" Process\tBurst Time\tWaiting Time\tTurn Around Time");

for(i=0;i<no\_p;i++)

{

System.out.println("\tP"+(i+1)+"\t "+burst\_time[i]+"\t\t "+WT[i]+"\t\t "+TT[i]);

}

System.out.println("\n----------------------------------------------------------------");

System.out.println("\nAverage waiting time : "+avg\_wait);

System.out.println("\nAverage Turn Around time : "+avg\_TT+"\n");

}

}

/\*Output:

Enter the number of process:

3

Enter Burst Time for processes:

P1: 24

P2: 3

P3: 3

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Processes:

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Process Burst Time Waiting Time Turn Around Time

P1 24 0 24

P2 3 24 27

P3 3 27 30

----------------------------------------------------------------

Average waiting time : 17.0

Average Turn Around time : 27.0 \*/