SJF.java

import java.util.Scanner;

import java.util.\*;

public class SJF {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("enter no. of processes:");

int n = sc.nextInt();

int pid[] = new int[n];

int at[] = new int[n];

int bt[] = new int[n];

int ct[] = new int[n];

int tat[] = new int[n];

int wt[] = new int[n];

float atat = 0;

float awt = 0;

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

{

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

pid[i] = sc.nextInt();

System.out.println("Enter the Arrival time:");

at[i] = sc.nextInt();

System.out.println("Enter the Burst time:");

bt[i] = sc.nextInt();

}

int F[] = new int[n];

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

{

F[i] = 0;

}

int st = 0;

int total = 0;

while(true)

{

int min = 99;

int c = n;

if(total == n)

break;

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

{

if( at[i] <= st && F[i] == 0 && bt[i] < min)

{

c = i;

min = bt[i];

}

}

if(c == n)

{

st = st + 1;

}

else

{

ct[c] = st + bt[c];

F[c] = 1;

st = ct[c];

total++;

}

}

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

{

tat[i] = ct[i] - at[i];

wt[i] = tat[i] - bt[i];

atat = atat + tat[i];

awt = awt + wt[i];

}

System.out.println("PID \t AT \t BT \t CT \t TAT\t WT");

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

{

System.out.println(pid[i] + "\t" + at[i]+ "\t" + bt[i] +

"\t" + ct[i] + "\t" + tat[i] + "\t"+ wt[i]);

}

System.out.println("Average TAT and WT are: ");

System.out.println("ATAT="+atat/n +"\t"+ "AWT"+awt/n);

}

}

