import java.util.Scanner;

public class priority {

public static void main(String args[]) {

Scanner s = new Scanner(System.in);

int x,n,p[],pp[],bt[],w[],t[],i;

float awt,atat;SSSSSSSSSS

p = new int[10];

pp = new int[10];

bt = new int[10];

w = new int[10];

t = new int[10];

//n is number of process

//p is process

//pp is process priority

//bt is process burst time

//w is wait time

// t is turnaround time

//awt is average waiting time

//atat is average turnaround time

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

n = s.nextInt();

System.out.print("\n\t Enter CPU time---priority \n");

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

{

System.out.print("\nProcess["+(i+1)+"]:");

bt[i] = s.nextInt();

pp[i] = s.nextInt();p[i]=i+1;

}

//sorting on the basis of priority

for(i=0;i<n-1;i++)

{

for(int j=i+1;j<n;j++)

{

if(pp[i]<pp[j])

{

x=pp[i];

pp[i]=pp[j];

pp[j]=x;

x=bt[i];

bt[i]=bt[j];

bt[j]=x;

x=p[i];

p[i]=p[j];

p[j]=x;

}

}

}

w[0]=0;

awt=0;

t[0]=bt[0];

atat=t[0];

for(i=1;i<n;i++)

{

w[i]=t[i-1];

awt+=w[i];

t[i]=w[i]+bt[i];

atat+=t[i];

}

//Displaying the process

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

System.out.print("\n\nProcess \t\t |Burst Time \t\t |Wait Time \t\t |Turn Time \n");

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

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

System.out.print("\n"+p[i]+"\t\t| "+bt[i]+"\t\t| "+w[i]+"\t\t|"+t[i]+"\t\t| "+pp[i]+"\n");

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

awt/=n;

atat/=n;

System.out.print("\n Average Wait Time : "+awt);

System.out.print("\n Average Turn Around Time : "+atat);

}

}

**Output:**

lab-a-26@laba26-Vostro-3669:~/Documents/sp os/spos/c10/priority$ java priority

Enter the number of process : 5

Enter CPU time---priority

Process[1]:10 3

Process[2]:1 1

Process[3]:2 3

Process[4]:1 4

Process[5]:5 2

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

Process |Burst Time |Wait Time |Turn Time

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

4 | 1 | 0 |1 | 4

3 | 2 | 1 |3 | 3

1 | 10 | 3 |13 | 3

5 | 5 | 13 |18 | 2

2 | 1 | 18 |19 | 1

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

Average Wait Time : 7

Average Turn Around Time : 10lab-a-26@laba26-Vostro-3669:~/Documents/sp os/spos/c10/priority$