Priority Scheduling

#include<iostream>

using namespace std;

int main()

{

int n, pid[10],wt[20], bt[20],tat[20],priority[20], awt, atat;

cout<<"enter the total number of processes";

cin>>n;

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

{

cout<<"Processes "<<i+1<<endl;

cout<<"enter the burst time "<<endl;

cin>>bt[i];

cout<<"enter the priority "<<endl;

cin>>priority[i];

pid[i]=i+1;

}

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

{

int pos=j;

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

{

if(priority[i]<priority[pos])

{ pos=i; }

}

int temp;

temp=priority[j];

priority[j]=priority[pos];

priority[pos]=temp;

temp=bt[j];

bt[j]=bt[pos];

bt[pos]=temp;

temp=pid[j];

pid[j]=pid[pos];

pid[pos]=temp;

}

wt[0]=0;

int total=0;

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

{

wt[i]=0;

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

{ wt[i]=wt[i]+bt[j];

total=total+wt[i];

}

}

awt=total/n;

total=0;

cout<<"\nProcesses BurstTime WaititngTime TurnaroundTime ";

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

{

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

total+=tat[i];

cout<<"\nP["<<pid[i]<<" ] "<<bt[i]<<" "<<wt[i]<<" "<<tat[i]<<endl;

}

atat=total/n;

cout<<"average waiting time ="<<awt<<endl;

cout<<"average turnaround time="<<atat<<endl;

return 0;

}

OUTPUT: enter the total number of processes2

Processes 1

enter the burst time :4

enter the priority :2

Processes 2

enter the burst time :4

enter the priority :1

Processes BurstTime WaititngTime TurnaroundTime

P[2 ] 4 0 4

P[1 ] 2 4 6

average waiting time =2

average turnaround time=5