|  |  |
| --- | --- |
|  | #include<stdio.h> |
|  | #include<conio.h> |
|  | int main() |
|  | { |
|  | int bt[30],p[30],wt[30],tat[30],pr[30],i,j,n,total=0,pos,temp,avg\_wt,avg\_tat; |
|  | printf("Enter Number of Process:"); |
|  | scanf("%d",&n); |
|  |  |
|  | printf("\n Enter Burst Time and Priority\n"); |
|  | for(i=0;i<n;i++) |
|  | { |
|  | printf("\nP[%d]\n",i+1); |
|  | printf("Burst Time:"); |
|  | scanf("%d",&bt[i]); |
|  | printf("Priority:"); |
|  |  |
|  | scanf("%d",&pr[i]); |
|  | p[i]=i+1; |
|  | } |
|  |  |
|  |  |
|  | for(i=0;i<n;i++) |
|  | { |
|  | pos=i; |
|  | for(j=i+1;j<n;j++) |
|  | { |
|  | if(pr[j]<pr[pos]) |
|  | pos=j; |
|  | } |
|  |  |
|  | temp=pr[i]; |
|  | pr[i]=pr[pos]; |
|  | pr[pos]=temp; |
|  |  |
|  | temp=bt[i]; |
|  | bt[i]=bt[pos]; |
|  | bt[pos]=temp; |
|  |  |
|  | temp=p[i]; |
|  | p[i]=p[pos]; |
|  | p[pos]=temp; |
|  | } |
|  |  |
|  | wt[0]=0; |
|  |  |
|  | for(i=1;i<n;i++) |
|  | { |
|  | wt[i]=0; |
|  | for(j=0;j<i;j++) |
|  | wt[i]+=bt[j]; |
|  |  |
|  | total+=wt[i]; |
|  | } |
|  |  |
|  | avg\_wt=total/n; |
|  | total=0; |
|  |  |
|  | printf(" \nProcess \t Burst Time \tWaiting Time\tTurnaround Time"); |
|  | for(i=0;i<n;i++) |
|  | { |
|  | tat[i]=bt[i]+wt[i]; |
|  | total+=tat[i]; |
|  | printf("\nP[%d]\t\t %d\t\t %d\t\t\t%d",p[i],bt[i],wt[i],tat[i]); |
|  | } |
|  |  |
|  | avg\_tat=total/n; |
|  | printf("\n\nAverage Waiting Time=%d",avg\_wt); |
|  | printf("\nAverage Turnaround Time=%d\n",avg\_tat); |
|  |  |
|  | return 0; |
|  | } |