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**Code:**

#include<stdio.h>

int n;

struct process

{

int p\_no;

int arrival\_t,burst\_t,ct,wait\_t,taround\_time,p;

int flag;

}p\_list[100];

void Sorting()

{

struct process p;

int i, j;

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

{

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

{

if(p\_list[i].arrival\_t > p\_list[j].arrival\_t)

{

p = p\_list[i];

p\_list[i] = p\_list[j];

p\_list[j] = p;

}

}

}

}

int main()

{

int i,t=0,b\_t=0,peak;

int a[10];

float wait\_time = 0, taround\_time = 0, avg\_w\_t=0, avg\_taround\_time=0;

printf("enter the no. of processes: ");

scanf("%d",&n);

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

{

p\_list[i].p\_no = i+1;

printf("\nEnter Details For P%d process:-\n", p\_list[i].p\_no);

printf("Enter Arrival Time: ");

scanf("%d", &p\_list[i].arrival\_t );

printf("Enter Burst Time: ");

scanf("%d", &p\_list[i].burst\_t);

p\_list[i].flag = 0;

b\_t = b\_t + p\_list[i].burst\_t;

}

Sorting();

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

{

a[i]=p\_list[i].burst\_t;

}

p\_list[9].burst\_t = 9999;

for(t = p\_list[0].arrival\_t; t <= b\_t+1;)

{

peak = 9;

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

{

if(p\_list[i].arrival\_t <= t && p\_list[i].burst\_t < p\_list[peak].burst\_t && p\_list[i].flag != 1)

{

peak = i;

}

if(p\_list[peak].burst\_t==0 && p\_list[i].flag != 1)

{

p\_list[i].flag = 1;

p\_list[peak].ct=t;p\_list[peak].burst\_t=9999;

printf("P%d completes in %d\n",p\_list[i].p\_no,p\_list[peak].ct);

}

}

t++;

(p\_list[peak].burst\_t)--;

}

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

{

p\_list[i].taround\_time=(p\_list[i].ct)-(p\_list[i].arrival\_t);

avg\_taround\_time=avg\_taround\_time+p\_list[i].taround\_time;

p\_list[i].wait\_t=((p\_list[i].taround\_time)-a[i]);

avg\_w\_t=avg\_w\_t+p\_list[i].wait\_t;

}

printf("PNO\tAT\tCT\tTA\tWTt\n");

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

{

printf("P%d\t%d\t%d\t%d\t%d\n",p\_list[i].p\_no,p\_list[i].arrival\_t,p\_list[i].ct,p\_list[i].taround\_time

,p\_list[i].wait\_t);

}

printf("Average Turn around Time: %f\t\n\n",avg\_taround\_time);

printf("Average Waiting Time :\t %f\t\n",avg\_w\_t);

}