

```

#include<stdio.h>

typedef struct Process
{
    int pid;

    int AT;

    int BT;

    int CT;

    int TAT;

    int WT;
}FC;

FC P[100],temp;

int n;

double sum1=0.0,sum2=0.0;

int main()
{
    printf("Enter the number of processors:\n");

    scanf("%d",&n);

    printf("Enter the PID,Arrival time and burst time for each process\n");

    for(int i=0;i<n;i++)
    {
        printf("%d.",i+1);

        scanf("%d%d%d",&P[i].pid,&P[i].AT,&P[i].BT);

    }

    for(int i=0;i<n;i++)
    {
        for(int j=i+1;j<n;j++)
        {
            if(P[i].AT>P[j].AT)
            {
                temp=P[i];

                P[i]=P[j];

                P[j]=temp;
            }
        }
    }
}

```

```

        P[j]=temp;
    }
}
for(int i=0;i<n;i++)
{
    if(P[i].AT==0)
    {
        P[i].CT=P[i].BT;
    }
    else
    {
        if(P[i].AT<P[i-1].CT)
        {
            P[i].CT=P[i-1].CT+P[i].BT;
        }
        else
        {
            P[i].CT=P[i-1].CT+(P[i].AT-P[i-1].CT)+P[i].BT;
        }
    }
}
for(int i=0;i<n;i++)
{
    P[i].TAT=P[i].CT-P[i].AT;
}
for(int i=0;i<n;i++)
{
    P[i].WT=P[i].TAT-P[i].BT;
}
printf("PID\tAT\tBT\tCT\tTAT\tWT\n");

```

```
for(int i=0;i<n;i++)
{
    printf("%d\t%d\t%d\t%d\t%d\t%d\n",P[i].pid,P[i].AT,P[i].BT,P[i].CT,P[i].TAT,P[i].WT);
}
for(int i=0;i<n;i++)
{
    sum1+=P[i].TAT;
    sum2+=P[i].WT;
}
double avg1=0.0,avg2=0.0;
avg1=sum1/double(n);
avg2=sum2/double(n);
printf("Average of TAT is %1fms\n",avg1);
printf("Average of WT is %1fms",avg2);
}
```