PRACTICAL NO 5 : SHEDULING [SJF METHOD]

```
#include<stdio.h>
#include<string.h>
typedef struct process
{
char pname[10];
int burst;
int wt;
int rt;
int tat;
}p1;
int main()
{
p1 p[10];
float avg_tat=0;
float avg_wt=0;
float avg_rt=0;
int n;
int i;
int j;
p1 swap;
printf("\n ENTER THE NUMBER OF PROCESS :");
scanf("%d",&n);
for(i=0;i<n;i++)
{
p[i].pname[0]='p';
p[i].pname[1]=i;
p[i].pname[2]='\0';
printf("\nENTER THE BURST TIME :");
scanf("%d",&p[i].burst);
}
for(i=0;i<n;i++)
 {
 for(j=i+1;j<n;j++)
 { if(p[i].burst>p[j].burst)
 {
 swap=p[i];
 p[i]=p[j];
 p[j]=swap;
 }
 }
 }
for(i=0;i<n;i++)
{
p[i].wt=avg_rt;
p[i].rt=p[i].wt;
p[i].tat=p[i].burst+p[i].wt;
avg_tat=avg_tat+p[i].tat;
avg_rt=avg_rt+p[i].burst;
}
avg_wt=0;
for(i=0;i<n;i++)
{
avg_wt=p[i].wt+avg_wt;
}
avg_wt=avg_wt/n;
avg_tat=avg_tat/n;
printf("\nAVERAGE WAITING TIME : %f",avg_wt);
printf("\nAVERAGE TURN ARROUND TIME :%f",avg_tat);
return 0;
}
```

OUTPUT :

```
ENTER THE NUMBER OF PROCESS :3

ENTER THE BURST TIME :20

ENTER THE BURST TIME :4

ENTER THE BURST TIME :3

AVERAGE WAITING TIME : 3.333333
AVERAGE TURN ARROUND TIME :12.333333
```