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2- Source Code :-

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
void main()
{
    int ct[20], at[10], n, i, j, temp, st[10], ft[10], wt[10],
    ta[10];
    int totwt = 0, totta = 0;
    float awt, ata;
    char pn[10][10], t[10];
    printf("Enter the number of process:");
    scanf("%d", &n);
    for (i = 0; i < n; i++)
```

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```

}
printf("Enter process name, arrived time & execution time:");
scanf("%s %d %d", pn[i], at[i], et[i]);
}
for (i=0; i<n; i++)
for (j=0; j<n; j++)
{
if (et[i]<et[j])
{
temp = at[i];
at[i] = at[j];
at[j] = temp;
temp = et[i];
et[i] = et[j];
et[j] = temp;
strcpy(t, pn[i]);
strcpy(pn[i], pn[j]);
strcpy(pn[j], t);
}
}
for (i=0; i<n; i++)
{
if (i==0)
st[i] = at[i];
else
st[i] = ft[i-1];
wt[i] = st[i] - at[i];
ft[i] = st[i] + et[i];
}

```

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```
ta[i] = ft[i] - at[i];
```

```
totwt += wt[i];
```

```
totta += ta[i];
```

```
}
```

```
awt = (float) totwt / n;
```

```
ata = (float) totwt totta / n;
```

```
printf("\n Pname \t arrival time \t execution time \t waiting time  
 \t \t \t \t \t \t");
```

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

```
printf("\n %s \t %5d \t %5d \t %5d \t %5d",
```

```
pn[i], at[i], et[i], wt[i], ta[i]);
```

```
printf("\n Average waiting time is : %f", awt);
```

```
printf("\n Average turnaround time is : %f", ata);
```

```
getch();
```

```
}
```

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