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```
# include <stdio.h>
# include <conio.h>
# include <string.h>
void main()
{
int et[20], at[10], n, i, j, temp, st[10], ft[10],
 wt[10], ta[10];
int totalwt=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++)
{
printf("Enter process name, arrival 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] < at[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];
ta[i] = ft[i] - at[i];
totwt += wt[i];
totta += ta[i];
}
```

```
awt = (float) totwt/n;
ata = (float) totta/n;
printf ("\nPname\tarrival time\t execution time\t
        waiting time\ttatime");
for (i=0; i<n ; i++)
Printf ("\n%s\t%5d\t\t%5d\t\t%5d", pn[i],
        at[i], et[i], wt[i], ta[i]);
Printf ("\nAverage waiting time is: %f", awt);
Printf ("\n Average turnaround time is: %f", ata);
 getch ();
}
```