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Course - Rec. IT (A)

Semester - 2

Date

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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 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++) {
        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] < et[j]) {
                temp = at[i];
                at[i] = at[j];
                at[j] = temp;
                temp = et[i];
                et[i] = et[j];
                et[j] = temp;
            }
        }
    }
}
```

Arshad



```

    strcpy(b, pnci);
    strcpy(pnci, pncj);
    strcpy(pncj, t);
}
}

```

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

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        st[i] = at[i];
    } else {

```

```

        else

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        st[i] = ft[i] - 1;

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        wt[i] = st[i] - at[i];

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

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        totwt += wt[i];

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        totft += ft[i];
    }
}

```

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cwt = (float) totwt / n;

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ata = (float) totft / n;

```

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printf("\n process arrival time & execution time & waiting time & turn around time");

```

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

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    printf("process id %d \t arrival time %d \t execution time %d \t waiting time %d \t turn around time %d", pnci, at[i], ft[i], wt[i], totft);

```

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    printf("\n average waiting time is: %f", cwt);

```

```

    printf("\n average turn around time is: %f", ata);

```

```

    getch();
}

```

Answer

Enter number of process:4

Enter Burst Time:

P1:10

P2:2

P3:1

P4:4

Process	Burst Time	Waiting Time	Turnaround Time
P3	1	0	1
P2	2	1	3
P4	4	3	7
P1	10	7	17

Average Waiting Time=2.750000

Average Turnaround Time=7.000000

Process returned 0 (0x0) execution time : 19.949 s

Press any key to continue.