

*//Priority Scheduling*

#include <stdio.h>

#include <string.h>

typedef struct process {

    char pname[10];

    int burst;

    int priority;

    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;

    printf("\n ENTER THE NUMBER OF PROCESS :");

    scanf("%d", &n);

    for (int 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);

        printf("\nENTER THE PRIORITY:");

        scanf("%d", &p[i].priority);

    }

    for (int i = 0; i < n; i++) {

        for (int j = i + 1; j < n; j++) {

            if (p[i].priority > p[j].priority) {

                p1 swap = p[i];

                p[i] = p[j];

                p[j] = swap;

            }

        }

    }

```

for (int 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 (int 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 AROUND TIME :%f", avg_tat);

return 0;
}

```