Write a C program to simulate the following CPU scheduling algorithm to find turnaround time and waiting time for First Come First Serve (FCFS).

```
#include <stdio.h>
void sort(int proc_id[], int at[], int bt[], int n) {
    int temp;
    for (int i = 0; i < n - 1; i++) {
        for (int j = i + 1; j < n; j++) {
            if (at[j] < at[i]) {

                temp = at[i];
                at[i] = at[j];
                at[j] = temp;

                temp = bt[i];
                bt[i] = bt[j];
                bt[j] = temp;

                temp = proc_id[i];
                proc_id[i] = proc_id[j];
                proc_id[j] = temp;
            }
        }
    }
}

int main() {
    int n, c = 0;
    printf("Enter number of processes: ");
    scanf("%d", &n);

    int proc_id[n], at[n], bt[n], ct[n], tat[n], wt[n];
    double avg_tat = 0.0, ttat = 0.0, avg_wt = 0.0, twt = 0.0;

    for (int i = 0; i < n; i++)
        proc_id[i] = i + 1;

    printf("Enter arrival times:\n");
    for (int i = 0; i < n; i++)
        scanf("%d", &at[i]);

    printf("Enter burst times:\n");
    for (int i = 0; i < n; i++)
        scanf("%d", &bt[i]);

    sort(proc_id, at, bt, n);
       for (int i = 0; i < n; i++) {
        if (c >= at[i]) {
            c += bt[i];
        } else {
```

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            c = at[i] + bt[i];
        }
        ct[i] = c;
    }
      for (int i = 0; i < n; i++) {
        tat[i] = ct[i] - at[i];
        wt[i] = tat[i] - bt[i];
        ttat += tat[i];
        twt += wt[i];
    }

    avg_tat = ttat / (double)n;
    avg_wt = twt / (double)n;

    printf("FCFS scheduling:\n");
    printf("PID\tAT\tBT\tCT\tTAT\tWT\n");
    for (int i = 0; i < n; i++) {
        printf("%d\t%d\t%d\t%d\t%d\t%d\n", proc_id[i], at[i], bt[i], ct[i], tat[i], wt[i]);
    }

    printf("\nAverage turnaround time: %.2lf ms\n", avg_tat);
    printf("Average waiting time: %.2lf ms\n", avg_wt);

    return 0;
}
```

OUTPUT: