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#include <stdio.h>

int main() {
    int n, i, j, pos, temp;
    int bt[20], wt[20], tat[20], pr[20], p[20];
    float avgwt = 0, avgtat = 0;
    printf("Enter number of processes: ");
    scanf("%d", &n);
    printf("Enter burst time and priority for each process:\n");
    for (i = 0; i < n; i++) {
        printf("P%d - Burst Time: ", i + 1);
        scanf("%d", &bt[i]);
        printf("P%d - Priority (lower number = higher priority): ", i + 1);
        scanf("%d", &pr[i]);
        p[i] = i + 1; // process ID
    }
    for (i = 0; i < n - 1; i++) {
        pos = i;
        for (j = i + 1; j < n; j++) {
            if (pr[j] < pr[pos]) pos = j;
        }
        temp = pr[i]; pr[i] = pr[pos]; pr[pos] = temp;
        temp = bt[i]; bt[i] = bt[pos]; bt[pos] = temp;

        temp = p[i]; p[i] = p[pos]; p[pos] = temp;
    }
    wt[0] = 0;
    for (i = 1; i < n; i++) {
        wt[i] = 0;
        for (j = 0; j < i; j++)

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        wt[i] += bt[j];
    avgwt += wt[i];
}
for (i = 0; i < n; i++) {
    tat[i] = bt[i] + wt[i];
    avgtat += tat[i];
}
printf("\nProcess\tBT\tPriority\tWT\tTAT\n");
for (i = 0; i < n; i++) {
    printf("P%d\t%d\t%d\t\t%d\t\t%d\n", p[i], bt[i], pr[i], wt[i], tat[i]);
}
printf("\nAverage Waiting Time: %.2f", avgwt / n);
printf("\nAverage Turnaround Time: %.2f\n", avgtat / n);
return 0;
}

```