```
#include<stdio.h>

// Function to find the waiting time for all processes
void findWaitingTime(int processes[], int n, int bt[], int wt[]) {
   // waiting time for the first process is 0
   wt[0] = 0;

   // calculating waiting time
   for (int i = 1; i < n; i++)
      wt[i] = bt[i - 1] + wt[i - 1];
}

// Function to calculate turn around time
void findTurnAroundTime(int processes[], int n, int bt[], int wt[], int tat[]) {
   // calculating turnaround time by adding bt[i] + wt[i]
   for (int i = 0; i < n; i++)
      tat[i] = bt[i] + wt[i];
}

// Function to calculate average time
void findavgTime(int processes[], int n, int bt[]) {
   int wt[n], tat[n], total_wt = 0, total_tat = 0;

   // Function to find waiting time of all processes
   findWaitingTime(processes, n, bt, wt);

   // Function to find turn around time for all processes
   findTurnAroundTime(processes, n, bt, wt, tat);

   // Display processes along with all details
   printf("Processes Burst time Waiting time Turn around time\n");
```

```
    // Calculate total waiting time and total turn around time
    for (int i = 0; i < n; i++) {
        total_wt = total_wt + wt[i];
        total_tat = total_tat + tat[i];
        printf(" %d ", processes[i]);
        printf("     %d ", bt[i]);
        printf("     %d", wt[i]);
        printf("     %d\n", tat[i]);
    }
    float s = (float) total_wt / (float) n;
    float t = (float) total_tat / (float) n;
    printf("Average waiting time = %f", s);
    printf("\n");
    printf("Average turn around time = %f ", t);
}

// Driver code
int main() {
    // process id's
    int n;
    printf("Enter the number of processes: ");
    scanf("%d", &n);

    int processes[n];
    printf("Enter process id's: ");
    for (int i = 0; i < n; i++)
        scanf("%d", &processes[i]);

    // Burst time of all processes
    int burst_time[n];
```

```
    printf("Enter burst time for each process:\n");
    for (int i = 0; i < n; i++)
        scanf("%d", &burst_time[i]);

    findavgTime(processes, n, burst_time);
    return 0;
}
```

Output-

```
Enter the number of processes: 3
Enter process id's: 1
2
3
Enter burst time for each process:
10
5
8
Processes Burst time Waiting time Turn around time
 1      10       0      10
 2      5       10      15
 3      8       15      23
Average waiting time = 8.333333
Average turn around time = 16.000000
```