```
#include<stdio.h>
typedef struct {
  int pID,aT,bT,sT,cT,taT,wT;
} Process;
void calculateTimes(Process p[], int n) {
  int sum=0;
  double atat;
  int currT = 0;
  for (int i = 0; i < n; i++) {
     p[i].sT = currT;
     p[i].cT = currT + p[i].bT;
     p[i].taT = p[i].cT - p[i].aT;
     p[i].wT = p[i].taT - p[i].bT;
     currT = p[i].cT;
     sum = sum + p[i].taT;
  }
  atat = (double)sum/n;
  printf("The average turn around time is %f\n",atat);
}
void displayp(Process p[], int n) {
  printf("Process\tArrival Time\tBurst Time\tStart Time\tCompletion Time\tTurnaround
Time\tWaiting Time\n");
  for (int i = 0; i < n; i++) {
     printf("%d\t%d\t\t%d\t\t%d\t\t%d\t\t%d\n", p[i].pID, p[i].aT,
          p[i].bT, p[i].sT, p[i].cT,
          p[i].taT, p[i].wT);
}
int main() {
  int n;
  printf("Enter the number of processes: ");
  scanf("%d", &n);
  Process p[n];
  for (int i = 0; i < n; i++) {
     printf("Enter the arrival time and burst time for process %d: ", i + 1);
     scanf("%d %d", &p[i].aT, &p[i].bT);
     p[i].pID = i + 1;
  }
  //calculateTimes(p, n);
```

```
//displayp(p, n);

for (int i = 0; i < n - 1; i++) {
    for (int j = 0; j < n - i - 1; j++) {
        if (p[j].aT > p[j + 1].aT) {
            Process temp = p[j];
            p[j] = p[j + 1];
            p[j + 1] = temp;
        }
    }
}

calculateTimes(p, n);
displayp(p, n);
return 0;
}
```

```
input
Enter the number of processes: 4
Enter the arrival time and burst time for process 1: 0
Enter the arrival time and burst time for process 2: 1
Enter the arrival time and burst time for process 3: 4
Enter the arrival time and burst time for process 4: 6
The average turn around time is 7.250000
Process Arrival Time
                        Burst Time
                                                        Completion Time Turnaround Time Waiting Time
                                        Start Time
                        3
                                        0
        0
                                                        3
                                                                         3
                                                                                         0
        1
                        6
                                        3
                                                                                         5
                        4
                                                        13
                        2
        6
                                        13
                                                        15
...Program finished with exit code 0
Press ENTER to exit console.
```