

```
1 //
2 // A (naive) administration system (only for 000)
3 //
4 // Created by hengxin on 10/10/21.
5 //
6
7 #include <stdio.h>
8 #include <math.h>
9 #include <ctype.h>
10
11 int main() {
12     /**
13      * Name and gender
14      */
15     char first_name[10];
16     char last_name[10];
17     char gender;
18
19     /**
20      * Birthday
21      */
22     int birth_year;
23     int birth_month;
24     int birth_day;
25     char weekday[10];
26
27     /**
28      * Scores
29      */
30     int c_score;
31     int music_score;
32     int medicine_score;
33
34     /**
35      * Statistics
36      */
37     double mean;
38     double standard_deviation;
```

```

39  int rank;
40
41  /**
42   * Basic scanf:
43   *
44   * Tayu lo
45   * M
46   * 1957-7-20
47   * Tuesday
48   * 40 100 80
49   * 73.3 24.94 10%
50   */
51  scanf("%9s %9s %c %d-%d-%d %9s %d %d %d %lf %lf
%d%%",
52         first_name, last_name, &gender,
53         &birth_year, &birth_month, &birth_day,
    weekday,
54         &c_score, &music_score, &medicine_score,
55         &mean, &standard_deviation,
56         &rank);
57
58  //  /**
59  //   * Expected scanf
60  //   */
61  //  scanf("%9s %9s %c %d-%d-%d %9s %d %d %d %*f
    %*f %d%%",
62  //         first_name, last_name, &gender,
63  //         &birth_year, &birth_month, &birth_day,
    weekday,
64  //         &c_score, &music_score, &medicine_score
    ,
65  //         &rank);
66
67  /**
68   * Statistics
69   */
70  mean = (c_score + music_score + medicine_score
    ) / 3.0;

```

```
71     standard_deviation = sqrt((pow(c_score - mean
    , 2) + pow(music_score - mean, 2) + pow(
    medicine_score - mean, 2)) / 3.0);
72
73     printf("%s %s \t %c \n"
74           "%.2d-%d-%d, %.3s.\n"
75           "C = %d \t Music = %d \t Medicine = %d\
    n"
76           "Mean = %.1f \t SD = %.2f \t Top = %d%%\
    \n",
77           first_name, last_name, toupper(gender),
78           birth_month, birth_day, birth_year,
    weekday,
79           c_score, music_score, medicine_score,
80           mean, standard_deviation, rank);
81
82     return 0;
83 }
```