[문제 1] **20명 학생의 성적 처리 프로그램을 작성하라.**
– 각 성적의 배점은 중간(30%), 기말(40%), 과제(20%), 출석(10%)이다. 각 성적은 rand()함수를 사용하여 1~100점 점수를 자동적으로 생성하라.

```c
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

#define STUDENT 20
#define CATEGORY 5

void Scores(double score[STUDENT][CATEGORY + 2])
{
    printf("번호\t중간\t기말\t과제\t출석\t성적\t등수\n");
    printf("=============================================================\n");
    for (int i = 0; i < STUDENT; i++)
    {
        printf("%2d\t%.0lf\t%.0lf\t%.0lf\t%.0lf\t%.2lf\t%d\n", i + 1, score[i][0], score[i][1], score[i][2], score[i][3], score[i][5], (int)score[i][6]);
    }
}

void Total_Scores(double score[STUDENT][CATEGORY + 2], double total_score[STUDENT])
{
    for (int i = 0; i < STUDENT; i++)
    {
        total_score[i] = (score[i][0] * 0.3) + (score[i][1] * 0.4) + (score[i][2] * 0.2) + (score[i][3] * 0.1) - (score[i][4] * 1);
        score[i][5] = total_score[i];
    }
}

void Ranks(double score[STUDENT][CATEGORY + 2])
{
    for (int i = 0; i < STUDENT; i++)
    {
        int rank = 1;
        for (int j = 0; j < STUDENT; j++)
        {
            if (score[i][5] < score[j][5])
            {
                rank++;
            }
        int rank = 1;
        for (int j = 0; j < STUDENT; j++)
        {
            if (score[i][5] < score[j][5])
            {
                rank++;
            }
        }
        score[i][6] = rank;
    }
}

int main()
{
    srand(time(NULL));

    double score[STUDENT][CATEGORY + 2] = { 0 };
    double total_score[STUDENT] = { 0 };

    for (int i = 0; i < STUDENT; i++)
    {
        for (int j = 0; j < CATEGORY; j++)
        {
            score[i][j] = rand() % 100 + 1;
        }
        score[i][4] = rand() % 10 + 1;
    }

    Total_Scores(score, total_score);
    Ranks(score);
    Scores(score);

    return 0;
}
```

번호	중간	기말	과제	출석	성적	등수
1	3	76	81	51	44.60	10
2	16	84	32	62	47.00	9
3	3	97	51	3	41.20	12
4	6	27	14	39	11.30	19
5	75	49	66	46	49.90	7
6	39	5	81	9	25.80	16
7	92	62	14	43	54.50	5
8	75	74	58	71	69.80	2
9	10	41	17	45	17.30	18
10	11	4	96	94	30.50	14
11	37	20	46	18	21.10	17
12	1	73	92	59	52.80	6
13	23	62	100	70	55.70	3
14	3	52	71	31	29.00	15
15	93	86	86	23	71.80	1
16	14	11	22	28	9.80	20
17	2	87	99	35	49.70	8
18	49	61	20	21	42.20	11
19	42	68	75	34	55.20	4
20	90	16	25	33	38.70	13