```
runner% cat score.c
/* Read scores to negative sentinal; find their average */
#include <stdio.h>

void main(void)
{
        int score, sum = 0, count = 0;
        double ave;

        fscanf(stdin, "%i", &score);
        while (score >= 0) {
                count = count + 1;
                sum = sum + score;
                printf(" Score: %2i = %4i\n", count, score);
                fscanf(stdin, "%i", &score);
        }
        ave = (double) sum / (double) count;
        printf("Average of %i scores: %.2f\n", count, ave);
}

runner% cat score.data
90
100
80
-1
runner%  lint -m -u score.c

function returns value which is always ignored
    fscanf              printf
runner% cc -o score score.c
runner% score <score.data
 Score:  1 =   90
 Score:  2 =  100
 Score:  3 =   80
Average of 3 scores: 90.00
runner% cat -n score2.c
     1  /* Read scores to negative sentinal; find their average */
     2  /* Uses another version of the loop, with the same output */
     3  #include <stdio.h>
     4
     5  void main(void)
     6  {
     7          int score, sum = 0, count = 0;
     8          double ave;
     9
    10          while (1) {  /* produces a lint warning */
    11                  fscanf(stdin, "%i", &score);
    12                  if (score < 0) break;
    13                  count = count + 1;
    14                  sum = sum + score;
    15                  printf(" Score: %2i = %4i\n", count, score);
    16          }
    17          ave = (double) sum / (double) count;
    18          printf("Average of %i scores: %.2f\n", count, ave);
    19  }
runner% lint -m -u score2.c
(10) warning: constant in conditional context

function returns value which is always ignored
    fscanf              printf
```

```
runner% cat score_file.c
/* Read scores to end-of-file; find their average */
#include <stdio.h>
#include <stdlib.h>

void main(void)
{
        FILE *infile;
        int score, sum = 0, count = 0;
        double ave;
        int file_status;

        infile = fopen("scores.text", "r");
        if (infile == NULL) {
                printf("Couldn't open file\n");
                exit(1);
        }
        file_status = fscanf(infile, "%i", &score);
        while (file_status != EOF) {
                count = count + 1;
                sum = sum + score;
                printf(" Score: %2i = %4i\n", count, score);
                file_status = fscanf(infile, "%i", &score);
        }
        ave = (double) sum / (double) count;
}

runner% cat scores.text
80
95
75
82
91

runner% score_file
 Score:  1 =   80
 Score:  2 =   95
 Score:  3 =   75
 Score:  4 =   82
 Score:  5 =   91
Average score: 84.60

runner% cat score_file2.c
/* High-tech version, more like "real" C */
#include <stdio.h>
#include <stdlib.h>

void main(void)
{
        FILE *infile;
        int score, sum = 0, count = 0;
        char file_name[] = "scores.text";

        if ((infile = fopen(file_name, "r")) == NULL) {;
                fprintf(stderr, "Couldn't open file: %s\n", file_name);
                exit(1);
        }
        while (fscanf(infile, "%i", &score) != EOF) {
                count++;
                sum += score;
                fprintf(stdout, " Score: %2i = %4i\n", count, score);
        }
        fprintf(stdout, "Average score: %.2f\n",
                (double) sum / (double) count);
}
```