

Reflex

Mississippis? Scooby-doobie-doo? One-Thousands? How do you count seconds when you don't have a stopwatch around?

In this program you are challenged to count a number of seconds as accurately as possible. If you are within 1 tenth of a second you win.

If you're not sure how the clock function in C works, here a good example for you.

Reflex is written by Joe Larson.

reflex.c listing begins:

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
#include <math.h>
#include <ctype.h>

#define MAX 9
#define WIN 0.1

void playgame (void) {
    char input;
    int goal;
    clock_t start, end;
    double elapsed, range;
    goal = rand () % MAX + 1;
    printf ("\nYour goal this time is %d seconds exactly\n"
        "Press ENTER when ready to start the timer...\n", goal);
    getchar ();
    start = clock ();
    printf ("Press ENTER to stop the timer\n");
    getchar ();
    end = clock ();
    elapsed = (double)(end - start) / CLOCKS_PER_SEC;
    printf ("%2f seconds.\n", elapsed);
    range = (elapsed > goal) ? elapsed - goal : goal - elapsed;
    if (range == 0)
        printf ("UNBELIEVABLE! Are you sure you're not a computer?\n");
    else if (range <= WIN)
        printf ("Close enough. You get a win for that one!\n");
    else printf ("Oh, %.2f away. Not close enough.\n", range);
}

int playagain (void) {
    char input;
    printf ("\nThat was fun. Would you like to play again? (y\n) ");
    do input = getchar(); while (!isalpha(input)); getchar();
    if (input == 'y' || input == 'Y') return (1);
    else return(0);
}

int main (void) {
    puts ("Reflex\n-----\n\n"
        "How's your reflexes? In this game see how accurately you can tell how\n"
        "much time has elapsed. The computer will give you a number of seconds.\n"
        "When you are ready press ENTER to start the timer, then press ENTER\n"
        "again when you think the given amount of time has elapsed.\n");
    srand (time(NULL));
    do playgame (); while (playagain ());
    exit (0);
}
```