

```

// GitHub URL
// https://github.com/nkd3v/programming-fundamental/blob/master/labs/lab5/game01.c

#include <windows.h>
#include <stdio.h>
#include <conio.h>

#define DELTA_TIME 500
#define SCREEN_HEIGHT 23
#define SCREEN_WIDTH 80

void gotoxy(int x, int y) {
    COORD c = { (SHORT)x, (SHORT)y };
    SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), c);
}

void draw_ship(int x, int y) {
    gotoxy(x, y);
    printf("<-0->");
}

void erase_ship(int x, int y) {
    gotoxy(x, y);
    printf("      ");
}

void move_ship(int *x, int *y, int dx, int dy) {
    erase_ship(*x, *y);

    if (*x + dx >= 0 && *x + dx <= SCREEN_WIDTH)
        *x += dx;
    if (*y + dy >= 0 && *y + dy <= SCREEN_HEIGHT)
        *y += dy;

    draw_ship(*x, *y);
}

int main() {
    char ch = ' ';
    int x = 38, y = 20;
    draw_ship(x, y);

    do {
        if (_kbhit()) {
            ch = _getch();

            if (ch == 'w')
                move_ship(&x, &y, 0, -1);
            else if (ch == 's')
                move_ship(&x, &y, 0, 1);
            else if (ch == 'a')
                move_ship(&x, &y, -1, 0);
            else if (ch == 'd')
                move_ship(&x, &y, 1, 0);

            fflush(stdin);
        }

        Sleep(DELTA_TIME);
    } while (ch != 'x');

    return 0;
}

```