```
#include <stdio.h>
#include <windows.h>
#include <conio.h>
#include <time.h>
void gotoxy(int x, int y)
       COORD c = \{ x, y \};
       SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), c);
}
void draw_ship(int x, int y)
       COORD c = \{ x, y \};
       SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), c);
       printf(" <-0-> ");
}
void setcursor(bool visible)
       HANDLE console = GetStdHandle(STD_OUTPUT_HANDLE);
       CONSOLE_CURSOR_INFO lpCursor;
       lpCursor.bVisible = visible;
       lpCursor.dwSize = 20;
       SetConsoleCursorInfo(console, &lpCursor);
}
void setcolor(int fq, int bq)
       HANDLE hConsole = GetStdHandle(STD_OUTPUT_HANDLE);
       SetConsoleTextAttribute(hConsole, bg * 16 + fg);
}
void erase_ship(int x, int y)
{
       COORD c = \{ x, y \};
       SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), c);
        setcolor(0, 0);
                        "):
       printf("
}
void erase_bullet(int x, int y)
{
        COORD a = \{ x, y \};
        SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), a);
       setcolor(0, 0);
       printf(" ");
```

```
void erase_star(int x, int y)
        COORD b = \{ x, y \};
        SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), b);
        setcolor(0, 0);
        printf(" ");
}
char cursor(int x, int y)
        HANDLE hStd = GetStdHandle(STD_OUTPUT_HANDLE);
        char buf[2]; COORD c = { x,y }; DWORD num_read;
        if (!ReadConsoleOutputCharacter(hStd, (LPTSTR)buf, 1, c, (LPDWORD)&num
read))
                return '\0';
        else
               return buf[0];
int main()
        srand(time(NULL));
        char ch = '.';
        int x = 38, y = 20;
        int xbullet[100], ybullet[100];
        int num = 1, point = 0;
        setcolor(2, 4);
        setcursor(0);
        draw_ship(x, y);
        int direction = 0;
        int shoot[100], bullet = 0, ammo = 50;
        do {
                if (_kbhit()) {
                        ch = _getch();
                        if (ch == 'a') { direction = 1; }
                        else if (ch == 'd') { direction = 2; }
                        else if (ch == 's') { direction = 0; }
                        if (ch == ' ') {
                                Beep(700, 400);
                                if (bullet < ammo) {</pre>
                                        bullet += 1;
                                        ybullet[bullet] = 19;
```

```
xbullet[bullet] = x + 3;
                                shoot[bullet] = 1;
                        }
                }
                fflush(stdin);
        }
        //move
        if (direction == 1 && x != 0) {
                erase_ship(x, y);
                setcolor(2, 4);
                draw_ship(--x, y);
        else if (direction == 2 && x != 73) {
                erase_ship(x, y);
                setcolor(2, 4);
                draw_ship(++x, y);
        }
        //star
        if (num <= 20)
                int stayrand = rand() % 4 + 2;
                int staxyrand = rand() % 61 + 10;
                setcolor(2, 0);
                gotoxy(staxyrand, stayrand);
                printf("*");
                Sleep(50);
                num++;
        }
        //shoot
        for (int i = 1; i <= bullet; i++)</pre>
                if (shoot[i] == 1) {
                        erase_bullet(xbullet[i], ybullet[i]);
                        if (ybullet[i] > 0) {
if (cursor(xbullet[i], ybullet[i] - 1) == '*')
                                        Beep(1000, 400);
                                        num = num - 1;
erase_bullet(xbullet[i], ybullet[i]);
erase_bullet(xbullet[i], ybullet[i] - 1);
                                        shoot[i] = 0;
                                        point += 1;
```

```
else
                                         {
                                                 gotoxy(xbullet[i], --
ybullet[i]);
                                                 setcolor(2, 4);
                                                 printf("|");
                                         }
                                 }
                                 else {
                                         shoot[i] = 0;
                                 }
                        }
                setcolor(9, 0);
                gotoxy(0, 0);
                printf("%d", point);
                Sleep(100);
        } while (ch != 'x');
        return 0;
}
```

