

```

1 #include <stdio.h>
2 #include <windows.h>
3 #include <conio.h>
4 #include <stdlib.h>
5 #include <stdbool.h>
6
7 void setcolor(int fg, int bg)
8 {
9     HANDLE hConsole = GetStdHandle(STD_OUTPUT_HANDLE);
10    SetConsoleTextAttribute(hConsole, bg * 16 + fg);
11 }
12
13 void setcursor(bool visible)
14 {
15     HANDLE console = GetStdHandle(STD_OUTPUT_HANDLE);
16     CONSOLE_CURSOR_INFO lpCursor;
17     lpCursor.bVisible = visible;
18     lpCursor.dwSize = 20;
19     SetConsoleCursorInfo(console, &lpCursor);
20 }
21
22 void gotoxy(int x, int y)
23 {
24     COORD c = {x, y};
25     SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), c);
26 }
27
28 void erase_ship(int x, int y)
29 {
30     printf(" ");
31 }
32
33 void draw_ship(int x, int y)
34 {
35     erase_ship(x, y);
36     gotoxy(x, y);
37     printf("<-0-> ");
38 }
39
40 void draw_bullet(int x, int y)
41 {
42     gotoxy(x, y);
43     printf("^");
44 }
45
46 void clear_bullet(int x, int y)
47 {
48     gotoxy(x, y);
49     printf(" ");
50 }
51
52 int main()
53 {
54     system("cls");
55     setcursor(0);
56     setcolor(2, 4);
57     char ch = ' ', vac = ' ';
58     int x = 30, y = 20;
59     int bullet[5][3] = {{0, 0, 0}, {0, 0, 0}, {0, 0, 0}, {0, 0, 0}, {0, 0, 0}}, state = 0, ammo = 5; // {x,y,state}
60     draw_ship(x, y);
61     system("CLS");
62     do
63     {
64         if (_kbhit())
65         {
66             ch = _getch();
67
68             if (ch == 'a')
69             {
70                 vac = 'a';
71             }
72             if (ch == 'd')
73             {
74                 vac = 'd';
75             }
76             if (ch == 's')
77             {
78                 vac = 's';
79             }
80             if (ch == ' ' && ammo > 0)
81             {
82                 vac = ' ';
83
84                 bullet[state][2] = 1;
85                 bullet[state][0] = x + 3;
86                 bullet[state][1] = y - 1;
87                 state++;
88                 state = state % 5;
89                 ammo--;
90             }
91         }
92
93         fflush(stdin);
94
95         if (vac == 'a' && x > 0)
96         {
97             draw_ship(x --, y);
98         }
99
100        if (vac == 'd' && x < 80)
101        {
102            draw_ship(x ++, y);
103        }
104
105        if (vac == 's' && x > 0 && x < 80)
106        {
107            draw_bullet(x, y);
108        }
109
110        for (size_t i = 0; i < 5; i++)
111        {
112            if (bullet[i][2] == 1)
113            {
114                clear_bullet(bullet[i][0], bullet[i][1]);
115                if (bullet[i][1] == 2)
116                {
117                    bullet[i][2] = 0;
118                    ammo++;
119                }
120                else
121                {
122                    draw_bullet(bullet[i][0], --bullet[i][1]);
123                }
124            }
125        }
126
127        Sleep(100);
128    } while (ch != 'x');
129    return 0;
130 }

```

Select C:\code\project\profun\lab7\lab7.exe



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<-0->