```
1 # encoding: utf-8
 2
3 require 'sdl'
4 require 'image'
 6 \text{ SCREEN_W} = 640
   SCREEN_H = 480
 8 BOTTOM
10 SDL. init (SDL::INIT_EVERYTHING)
11 SDL::TTF.init
12 screen = SDL.set_video_mode(SCREEN_W, SCREEN_H, 16, SDL::SWSURFACE)
13
14 bom = Bom. new(screen)
15 gun = Gun. new (screen)
16 ufo = Ufo. new (screen)
17
18 \text{ en}1 = \text{Enemy. new}(\text{screen}, 30, \text{ufo})
19 en1. speed = 0.3
20 \text{ en}2 = \text{Enemy. new}(\text{screen}, 140, \text{ufo})
21 en2. speed = 0. 5
22
\frac{1}{23} ufo_hp = SCREEN_W - 100
24 \text{ you}_{hp} = SCREEN_W - 100
26 font = SDL::TTF.open('font/ehsmb.ttf', 20) 27
28 loop do
29
     while event=SDL::Event2.poll
30
        case event
31
        when SDL::Event2::Quit
32
          exit
        when SDL::Event2::KeyDown
33
34
          exit if event.sym == SDL::Key::ESCAPE
35
        end
36
37
     end
38
     # 大砲を動かす
39
     SDL::Key.scan
     if SDL∷Key.press?(SDL∷Key∷LEFT)
gun.x -= 2
40
41
42
      end
43
      if SDL::Key.press?(SDL::Key::RIGHT)
44
        gun. x += 2
45
      end
46
47
      if gun. x < 0
48
       gun. x = 0
49
50
      if gun. x >= SCREEN_W - 100
51
        gun. x = SCREEN_W - 100
52
53
54
     # ミサイルを発射させる
if SDL∷Key.press?(SDL∷Key∷SPACE)
55
56
57
        bom. launch (gun)
58
       bom. speed = 0.5
59
     end
60
61
     if bom. y > 0
62
       bom. y -= bom. speed
63
     end
64
65
     # エイリアンを落とす
if en1.y > BOTTOM - en1.h
66
67
        ufo. x = rand(SCREEN_W - ufo. w)
68
69
        en1. reset (30)
70
        en1. speed = 0.3
71
72
73
      en1. y += en1. speed
74
      # エイリアン2を落とす
     if en2. y > BOTTOM - en2. h
75
        ufo. x = rand (SCREEN W - ufo. w)
```

```
77
           en2. reset (140)
 78
79
           en2. speed = 0.5
        end
 80
        en2. y += en2. speed
 81
 82
 83
        # UFOがミサイルに当たったか
        if ufo.hit(bom, 80)
ufo_hp -= 30
 84
 85
           bom. y = -50
 86
 87
        end
 88
        break if ufo_hp <= 0
 89
        # エイリアンが大砲に当たったか if en1. hit (gun, 30)
 90
 91
 92
           you_hp -= 40
 93
           ufo. x = rand (SCREEN_W - ufo. w)
 94
           en1. reset (30)
 95
           en1. speed = 0.3
 96
 97
        break if you_hp <= 0
 98
        # エイリアン2が大砲に当たったか
if en2.hit(gun, 30)
 99
100
101
           you_hp -= 80
           ufo.x = rand(SCREEN_W - ufo.w)
102
103
           en2. reset (140)
104
           en2. speed = 0.5
105
106
        break if you_hp <= 0
107
        # ゲームウィンドウを表示する SCREEN_W, BOTTOM, SCREEN_W, COPERN
108
109
110
                                                                                     [46, 41, 48])
        screen.fill_rect(0, BOTTOM, SCREEN_W, SCREEN_H-BOTTOM, [0, 0, 0])
111
112
113
        # HPを表示する
        screen.fill_rect(10, BOTTOM + 40, you_hp, 20, [255, 255, 0])
font.draw_solid_utf8(screen, "#{you_hp}", SCREEN_W - 80, BOTTOM + 40, 255, 255, 255)
screen.fill_rect(10, BOTTOM + 10, ufo_hp, 20, [255, 0, 0])
font.draw_solid_utf8(screen, "#{ufo_hp}", SCREEN_W - 80, BOTTOM + 10, 255, 255, 255)
114
115
116
117
118
        # キャラクターを表示する bom. put if bom. y > 0
119
120
121
122
        gun. put
        ufo. put
123
124
        en1. put
        en2. put
125
126
        screen. update_rect(0, 0, 0, 0)
127 end
128
129
130 # ゲームオーバーを表示する
131 font = SDL∷TTF.open('font/ehsmb.ttf', 50)
132 if you_hp <= 0
        screen.fill_rect(0, 0, SCREEN_W, SCREEN_H, [255, 0, 0])
font.draw_solid_utf8(screen, "GAME OVER...", 150, 200, 0, 0, 0)
133
134
135 elsif ufo_hp \leq 0
        screen.fill_rect(0, 0, SCREEN_W, SCREEN_H, [255, 255, 0])
font.draw_solid_utf8(screen, "MISSION CLEAR!!", 100, 200, 0, 0, 0)
136
137
138 end
139 screen. update rect (0, 0, 0, 0)
140
141
142 sleep(3)
143 exit
```