```ruby
 1 # encoding: utf-8
 2
 3 require 'sdl'
 4 require 'image'
 5
 6 SCREEN_W = 640
 7 SCREEN_H = 480
 8 BOTTOM   = 410
 9
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
15 gun = Gun.new(screen)
16 ufo = Ufo.new(screen)
17
18 en1 = Enemy.new(screen, 30,  ufo)
19 en1.speed = 0.3
20 en2 = Enemy.new(screen, 140, ufo)
21 en2.speed = 0.5
22
23 ufo_hp = SCREEN_W - 100
24 you_hp = SCREEN_W - 100
25
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
33     when SDL::Event2::KeyDown
34       exit if event.sym == SDL::Key::ESCAPE
35     end
36   end
37
38   # 大砲を動かす
39   SDL::Key.scan
40   if SDL::Key.press?(SDL::Key::LEFT)
41     gun.x -= 2
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   end
50   if gun.x >= SCREEN_W - 100
51     gun.x = SCREEN_W - 100
52   end
53
54   # エイリアンを落とす
55   if en1.y > BOTTOM - en1.h
56     ufo.x = rand(SCREEN_W - ufo.w)
57     en1.reset(30)
58     en1.speed = 0.3
59   end
60   en1.y += en1.speed
61
62   # エイリアン２を落とす
63   if en2.y > BOTTOM - en2.h
64     ufo.x = rand(SCREEN_W - ufo.w)
65     en2.reset(140)
66     en2.speed = 0.5
67   end
68   en2.y += en2.speed
69
70   # エイリアンが大砲に当たったか
71   if en1.hit(gun, 30)
72     you_hp -= 40
73     ufo.x = rand(SCREEN_W - ufo.w)
74     en1.reset(30)
75     en1.speed = 0.3
76   end
```

```
 77    break if you_hp <= 0
 78
 79    # エイリアン２が大砲に当たったか
 80    if en2.hit(gun, 30)
 81      you_hp -= 80
 82      ufo.x = rand(SCREEN_W - ufo.w)
 83      en2.reset(140)
 84      en2.speed = 0.5
 85    end
 86    break if you_hp <= 0
 87
 88    # ゲームウィンドウを表示する
 89    screen.fill_rect(0, 0,      SCREEN_W, BOTTOM,          [46, 41, 48])
 90    screen.fill_rect(0, BOTTOM, SCREEN_W, SCREEN_H-BOTTOM, [0,  0,  0 ])
 91
 92    # ＨＰを表示する
 93    screen.fill_rect(10, BOTTOM + 40, you_hp, 20, [255, 255, 0])
 94    font.draw_solid_utf8(screen, "#{you_hp}", SCREEN_W - 80, BOTTOM + 40, 255, 255, 255)
 95
 96
 97    # キャラクターを表示する
 98    gun.put
 99    ufo.put
100    en1.put
101    en2.put
102
103    screen.update_rect(0, 0, 0, 0)
104 end
105
106
107 # ゲームオーバーを表示する
108 font = SDL::TTF.open('font/ehsmb.ttf', 50)
109 if you_hp <= 0
110   screen.fill_rect(0, 0, SCREEN_W, SCREEN_H, [255, 0, 0])
111   font.draw_solid_utf8(screen, "GAME OVER...", 150, 200, 0, 0, 0)
112 elsif ufo_hp <= 0
113   screen.fill_rect(0, 0, SCREEN_W, SCREEN_H, [255, 255, 0])
114   font.draw_solid_utf8(screen, "MISSION CLEAR!!", 100, 200, 0, 0, 0)
115 end
116 screen.update_rect(0, 0, 0, 0)
117
118
119 sleep(3)
120 exit
```