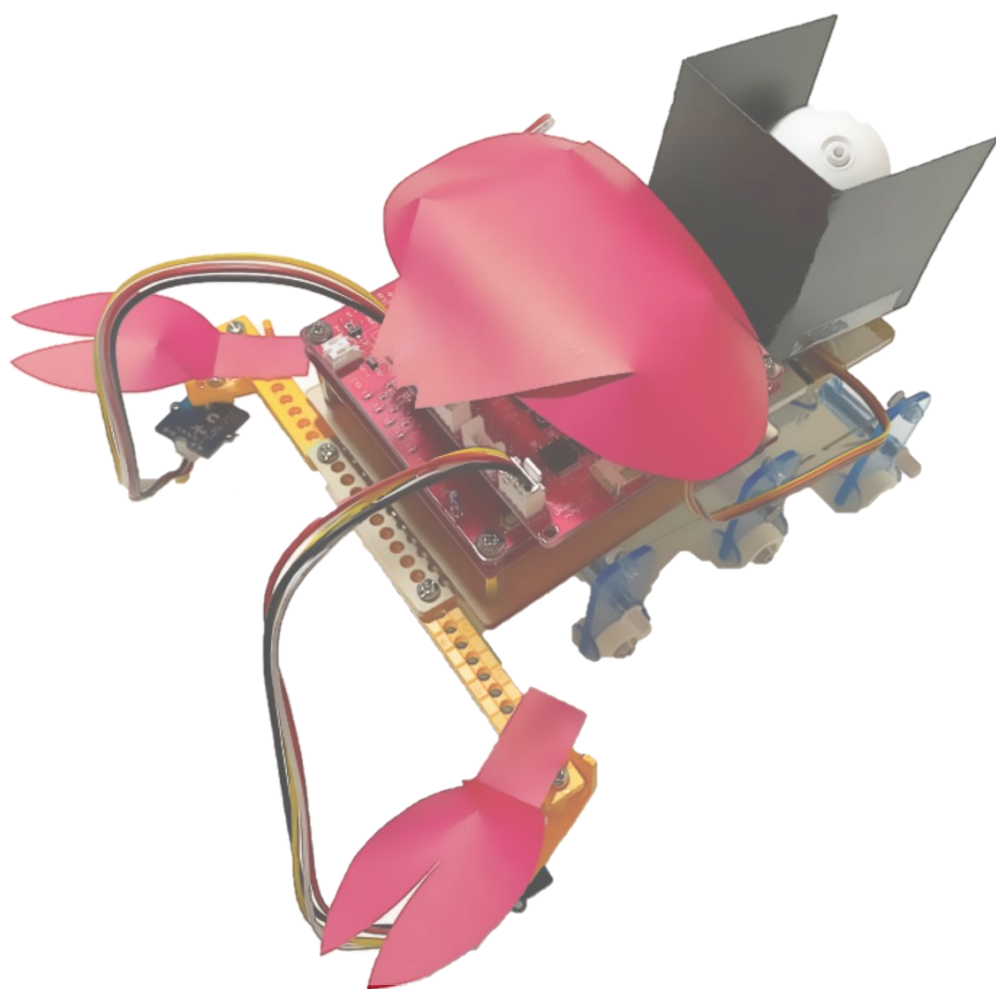


KANIROBOT

サンプルプログラム





ライトレース

モーターを動かす

サーボモーターで
プローブを落とす

```
1 motorEn = GPIO.new(12, GPIO::OUT)
2 motorEn.on()
3 m1 = GPIO.new(25, GPIO::OUT)
4 m1_pwm = PWM.new(26, ch=0)
5 m2 = GPIO.new(32, GPIO::OUT)
6 m2_pwm = PWM.new(33, ch=1)
7
8 lux36 = ADC.new(36, ADC::ATTEN_11DB, ADC::WIDTH_12BIT)
9
10 lux34 = ADC.new(34, ADC::ATTEN_11DB, ADC::WIDTH_12BIT)
11
12 servo27 = PWM.new(27, ch=3)
13 servo27.freq(50)
14 servo27.duty(0)
15
16 servo27.duty((((0.to_f - 90.0) * 0.95 / 90.0 + 1.45) / 20.0 * 1024).to_i)
17 sleep(0.8)
18 until lux36.rawread > 500 && lux34.rawread > 500 do
19   m1_pwm.duty(500)
20   m1.on()
21   sleep(0.01)
22   m2_pwm.duty(500)
23   m2.on()
24   sleep(0.01)
25   if lux36.rawread > 500
26     m1_pwm.duty(0)
27   end
28   if lux34.rawread > 500
29     m2_pwm.duty(0)
30   end
31   sleep(0.1)
32 end
33 m1_pwm.duty(500)
34 m1.on()
35 sleep(0.01)
36 m2_pwm.duty(500)
37 m2.on()
38 sleep(0.01)
39 sleep(1)
40 m1_pwm.duty(500)
41 m1.off()
42 sleep(0.01)
43 sleep(1.5)
44 m1_pwm.duty(0)
45 m2_pwm.duty(0)
46 servo27.duty((((90.to_f - 90.0) * 0.95 / 90.0 + 1.45) / 20.0 * 1024).to_i)
47 sleep(0.8)
48 sleep(1)
49 m1_pwm.duty(500)
50 m1.on()
51 sleep(0.01)
52 m2_pwm.duty(500)
53 m2.on()
54 sleep(0.01)
55 sleep(1.5)
56 while true do
57   m1_pwm.duty(500)
58   m1.on()
59   sleep(0.01)
60   m2_pwm.duty(500)
61   m2.on()
62   sleep(0.01)
63   if lux36.rawread > 500
64     m1_pwm.duty(0)
65   end
66   if lux34.rawread > 500
67     m2_pwm.duty(0)
68   end
69   sleep(0.1)
70 end
71
```

ライントレース

モーターを動かす

サーボモーターで
プローブを落とす

Motor activation pin initialization

Motor activation pin set to active

Motor 1 initialization

Motor 1 speed initialization

Motor 2 initialization

Motor 2 speed initialization

Light sensor 1 initialization

Light sensor 2 initialization

Servo motor 1 initialization

Servo motor 1 pulse width set to 50

Motor 1 set to forward direction

Motor 2 set to forward direction

Servo motor 1 pulse width ratio set to 0 degrees

Light sensor 1 value > 500 and Light sensor 2 value > 500 loop

Motor 1 speed set to 500

Motor 2 speed set to 500

If Light sensor 1 value > 500 then

Motor 1 speed set to 0

If Light sensor 2 value > 500 then

Motor 2 speed set to 0

0.1 seconds wait

Forever loop

Motor 1 speed set to 500

Motor 2 speed set to 500

1 seconds wait

Motor 1 set to back direction

1.5 seconds wait

Motor 1 speed set to 0

Motor 2 speed set to 0

Servo motor 1 pulse width ratio set to 90 degrees

1 seconds wait

Motor 1 set to front direction

Motor 1 speed set to 500

Motor 2 speed set to 500

1.5 seconds wait

Forever loop

Motor 1 speed set to 500

Motor 2 speed set to 500

If Light sensor 1 value > 500 then

Motor 1 speed set to 0

If Light sensor 2 value > 500 then

Motor 2 speed set to 0

0.1 seconds wait

Forever loop

ライトトレース

モーターを動かす

サーボモーターで
プローブを落とす


```
1 motorEn = GPIO.new(12, GPIO::OUT)~
2 motorEn.on~
3 motor25 = GPIO.new(25, GPIO::OUT)~
4 motor26_pwm = PWM.new(26, ch=0)~
5 motor32 = GPIO.new(32, GPIO::OUT)~
6 motor33_pwm = PWM.new(33, ch=1)~
7 lux36 = ADC.new(36, ADC::ATTEN_11DB, ADC::WIDTH_12BIT)~
8 lux34 = ADC.new(34, ADC::ATTEN_11DB, ADC::WIDTH_12BIT)~
9 servo27 = PWM.new(27, ch=3)~
10 servo27.freq(50)~
11 motor25.on~
12 motor32.on~
13 servo27.duty((((0.to_f - 90.0) * 0.95 / 90.0 + 1.45) / 20.0 * 1024).to_i)~
14 until lux36.rawread > 500 && lux34.rawread > 500 do~
15   motor26_pwm.duty(500)~
16   motor33_pwm.duty(500)~
17   if lux36.rawread > 500~
18     motor26_pwm.duty(0)~
19   end~
20   if lux34.rawread > 500~
21     motor33_pwm.duty(0)~
22   end~
23   sleep(0.1)~
24 end~
25 motor26_pwm.duty(500)~
26 motor33_pwm.duty(500)~
27 sleep(1)~
28 motor25.off~
29 sleep(1.5)~
30 motor26_pwm.duty(0)~
31 motor33_pwm.duty(0)~
32 servo27.duty((((90.to_f - 90.0) * 0.95 / 90.0 + 1.45) / 20.0 * 1024).to_i)~
33 sleep(1)~
34 motor25.on~
35 motor26_pwm.duty(500)~
36 motor33_pwm.duty(500)~
37 sleep(1.5)~
38 while true do~
39   motor26_pwm.duty(500)~
40   motor33_pwm.duty(500)~
41   if lux36.rawread > 500~
42     motor26_pwm.duty(0)~
43   end~
44   if lux34.rawread > 500~
45     motor33_pwm.duty(0)~
46   end~
47   sleep(0.1)~
48 end~
49 ~
```

ライントレース

モーターを動かす

サーボモーターで
プローブを落とす