#Moving Whale by Leonel M. and Zukiseka N.

#Import the libraries

from sense\_hat import SenseHat

from time import sleep

#Set up the Sense HAT

sense = SenseHat()

sense.set\_rotation(270, False)

#Set up the colour sensor

sense.color.gain = 60 # Set the sensitivity of the sensor

sense.color.integration\_cycles = 64 # The interval at which the reading will be taken

#Add colour variables and image

# Colour palette

a = (255, 255, 255) # White

b = (105, 105, 105) # DimGray

c = (0, 0, 1) # Background

z = (0, 0, 0) # Black

d = (100, 149, 237) # CornflowerBlue

e = (0, 0, 205) # MediumBlue

f = (25, 25, 112) # MidnightBlue

g = (0, 191, 255) # DeepSkyBlue

h = (0, 255, 255) # Cyan

j = (143, 188, 143) # DarkSeaGreen

k = (46, 139, 87) # SeaGreen

l = (0, 255, 127) # SpringGreen

m = (34, 139, 34) # ForestGreen

n = (154, 205, 50) # YellowGreen

q = (128, 128, 0) # Olive

p = (240, 230, 140) # Khaki

y = (255, 210, 2) # Yellow

dg = (184, 134, 11) # DarkGoldenrod

s = (139, 69, 19) # SaddleBrown

t = (255, 140, 0) # DarkOrange

u = (178, 34, 34) # Firebrick

r = (255, 0, 0) # Red

p = (255, 192, 203) # Pink

dp = (255, 20, 147) # DeepPink

for i in range(1):

rgb = sense.color # get the colour from the sensor

c = (rgb.red, rgb.green, rgb.blue) # use the sensed colour

# Frame 1 (Starting Position)

image1 = [

c, g, c, g, c, c, c, c,

g, c, g, c, g, c, f, f,

c, c, g, c, c, c, c, f,

f, f, f, f, f, c, f, f,

f, a, f, f, f, f, f, c,

f, f, f, f, f, f, c, c,

f, r, f, f, f, e, e, e,

r, r, f, f, f, e, e, e

]

# Frame 2

image2 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, f, f,

c, c, c, c, c, c, c, f,

f, f, f, f, f, c, f, f,

f, z, f, f, f, f, f, c,

f, f, f, f, f, f, c, c,

e, f, r, f, f, f, e, e,

r, r, r, f, f, f, e, e

]

# Frame 3

image3 = [

c, g, c, g, c, c, c, c,

g, c, g, c, g, c, f, f,

c, c, g, c, c, c, c, f,

f, f, f, f, f, c, f, f,

f, a, f, f, f, f, f, c,

f, f, f, f, f, f, c, c,

f, r, f, f, f, e, e, e,

r, r, f, f, f, e, e, e

]

# Frame 4

image4 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, f, f,

c, c, c, c, c, c, c, f,

f, f, f, f, f, c, f, f,

f, z, f, f, f, f, f, c,

f, f, f, f, f, f, c, c,

e, f, r, f, f, f, e, e,

r, r, r, f, f, f, e, e

]

# Frame 5

image5 = image3 # Frame 5 and Frame 3 are the same, hence the code

# Frame 6

image6 = image4 # Frame 6 is also similar to frame 4 like 5 n 3

# Frame 7

image7 = [

c, g, c, g, c, c, f, f,

g, c, g, c, g, c, f, f,

c, c, g, c, c, c, f, c,

f, f, f, f, f, c, f, c,

f, a, f, f, f, f, f, c,

f, f, f, f, f, c, c, c,

f, r, f, f, e, e, e, e,

r, r, f, f, e, e, e, e

]

# Frame 8

image8 = [

c, c, g, c, g, c, c, c,

c, g, c, g, c, f, c, c,

c, c, c, g, c, f, c, c,

c, f, f, f, f, c, f, c,

c, f, a, f, f, c, c, c,

c, f, f, f, f, c, c, c,

e, f, r, f, e, e, e, e,

e, r, r, f, e, e, e, e

]

# Frame 9

image9 = [

c, c, c, c, c, f, f, f,

c, c, c, c, c, c, f, f,

c, c, c, c, c, f, f, c,

c, c, c, f, f, f, f, c,

c, c, c, f, f, f, c, c,

c, e, e, f, f, f, e, e,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Frame 10

image10 = [

c, c, c, c, f, c, c, f,

c, c, c, c, c, f, f, f,

c, c, c, c, c, c, f, c,

c, c, c, f, f, f, f, c,

c, c, c, f, f, f, c, c,

c, e, c, f, f, f, e, c,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Frame 11

image11 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, f, c, c, c, f, c,

c, c, c, f, f, f, c, c,

c, c, c, c, f, c, c, c,

e, c, c, c, f, c, c, e,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Frame 11

image12 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, f, c, c, c, f, c,

c, c, c, f, f, f, c, c,

e, c, c, c, f, c, c, e,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Frame 11

image13 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, f, c, c, c, f, c,

e, c, c, f, f, f, c, e,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Frame 12 (Whale disappears into thr water)

image14 = [

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

c, c, c, c, c, c, c, c,

e, e, e, e, e, e, e, e,

e, e, e, e, e, e, e, e

]

# Display the image

for i in range(2):

sense.set\_pixels(image1)

sleep(1)

sense.set\_pixels(image2)

sleep(1.5)

sense.set\_pixels(image3)

sleep(2)

sense.set\_pixels(image4)

sleep(1)

sense.set\_pixels(image6)

sleep(1)

sense.set\_pixels(image7)

sleep(1.5)

sense.set\_pixels(image9)

sleep(1)

sense.set\_pixels(image10)

sleep(1)

sense.set\_pixels(image11)

sleep(1)

sense.set\_pixels(image12)

sleep(0.5)

sense.set\_pixels(image13)

sleep(0.5)

sense.set\_pixels(image14)

sleep(2)

x = a # white screen to indicate it's fin :)

sense.clear(x)