

Raspberry Sense HAT test

```
apt-get update
```

```
apt-get install sense-hat
```

```
pip install pillow
```

```
#!/usr/bin/python
```

```
#arc en ciel arrêt CTRL/C
```

```
import time
```

```
from sense_hat import SenseHat
```

```
import signal
```

```
import os
```

```
import time
```

```
sense = SenseHat()
```

```
print('Mon PID est:', os.getpid())
```

```
def receiveSignal(signalNumber, frame):
```

```
    print('Demande arrêt:', signalNumber)
```

```
    sense.clear()
```

```
    exit()
```

```
    return
```

```
if __name__ == '__main__':
```

```
    # register the signals to be caught
```

```
    signal.signal(signal.SIGHUP, receiveSignal)
```

```
    signal.signal(signal.SIGINT, receiveSignal)
```

```
    signal.signal(signal.SIGQUIT, receiveSignal)
```

```
    signal.signal(signal.SIGILL, receiveSignal)
```

```
    signal.signal(signal.SIGTRAP, receiveSignal)
```

```
    signal.signal(signal.SIGABRT, receiveSignal)
```

```
    signal.signal(signal.SIGBUS, receiveSignal)
```

```
    signal.signal(signal.SIGFPE, receiveSignal)
```

```
    #signal.signal(signal.SIGKILL, receiveSignal)
```

```
    signal.signal(signal.SIGUSR1, receiveSignal)
```

```
    signal.signal(signal.SIGSEGV, receiveSignal)
```

```
    signal.signal(signal.SIGUSR2, receiveSignal)
```

```
    signal.signal(signal.SIGPIPE, receiveSignal)
```

```
    signal.signal(signal.SIGALRM, receiveSignal)
```

```
    signal.signal(signal.SIGTERM, receiveSignal)
```

```
sense.low_light = True
```

```
pixels = [
```

```
    [255, 0, 0], [255, 0, 0], [255, 87, 0], [255, 196, 0], [205, 255, 0], [95, 255, 0], [0, 255, 13], [0, 255, 122],
```

```
    [255, 0, 0], [255, 96, 0], [255, 205, 0], [196, 255, 0], [87, 255, 0], [0, 255, 22], [0, 255, 131], [0, 255, 240],
```

```
    [255, 105, 0], [255, 214, 0], [187, 255, 0], [78, 255, 0], [0, 255, 30], [0, 255, 140], [0, 255, 248], [0, 152, 255],
```

```
    [255, 223, 0], [178, 255, 0], [70, 255, 0], [0, 255, 40], [0, 255, 148], [0, 253, 255], [0, 144, 255], [0, 34, 255],
```

```
    [170, 255, 0], [61, 255, 0], [0, 255, 48], [0, 255, 157], [0, 243, 255], [0, 134, 255], [0, 26, 255], [83, 0, 255],
```

```
    [52, 255, 0], [0, 255, 57], [0, 255, 166], [0, 235, 255], [0, 126, 255], [0, 17, 255], [92, 0, 255], [201, 0, 255],
```

```
    [0, 255, 66], [0, 255, 174], [0, 226, 255], [0, 117, 255], [0, 8, 255], [100, 0, 255], [210, 0, 255], [255, 0, 192],
```

```
    [0, 255, 183], [0, 217, 255], [0, 109, 255], [0, 0, 255], [110, 0, 255], [218, 0, 255], [255, 0, 183], [255, 0, 74]
```

```
]
msleep = lambda x: time.sleep(x / 1000.0)
def next_colour(pix):
    r = pix[0]
    g = pix[1]
    b = pix[2]
    if (r == 255 and g < 255 and b == 0):
        g += 1
    if (g == 255 and r > 0 and b == 0):
        r -= 1
    if (g == 255 and b < 255 and r == 0):
        b += 1
    if (b == 255 and g > 0 and r == 0):
        g -= 1
    if (b == 255 and r < 255 and g == 0):
        r += 1
    if (r == 255 and b > 0 and g == 0):
        b -= 1
    pix[0] = r
    pix[1] = g
    pix[2] = b
while True:
    for pix in pixels:
        next_colour(pix)
    sense.set_pixels(pixels)
    msleep(0.5)
```

<https://pythonhosted.org/sense-hat/api/#led-matrix>