



RASPBERRY

## **Test the Sense HAT**

Open Python 3 and enter the following commands directly into the shell:

(do not type the chevrons >>>)

```
>>> from sense_hat import SenseHat
>>> sense = SenseHat()
>>> sense.show_message("Hello world")
```

Press Enter after each line, and after the third line, the message should appear on the Sense HAT's display.

2 Now try retreiving the sensor values:

```
>>> sense.temperature
>>> sense.humidity
>>> sense.pressure
>>> sense.accelerometer
>>> sense.gyroscope
>>> sense.orientation
```

When you press Enter, you will see the sensor's value.







## **Faces**

Open a new window and type:

```
from sense hat import SenseHat
from faces import normal, happy, sad
from time import sleep
sense = SenseHat()
sense.set pixels(sad)
sleep(1)
sense.set_pixels(normal)
sleep(1)
sense.set_pixels(happy)
```

Run the code with F5 and you should see a sad face, a normal face and a happy face appear.

## And breathe...

Replace the last 5 lines with:

```
start humidity = sense.humidity
while True:
    print(sense.humidity)
    if sense.humidity > start humidity + 10:
        sense.set pixels(happy)
    elif sense.humidity > start_humidity + 5:
        sense.set pixels(normal)
    else:
        sense.set_pixels(sad)
    sleep(1)
```

Run the code again. Now breathe on the Sense HAT and see if you can make it smile!





