

# TIGHTROPE GAME

Sense Hats for the Raspberry Pi



# technocamps

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## Getting Started!

To download all the files you need, type this into the terminal on your Pi (make sure your Pi is connected to the Internet!)

```
git clone https://github.com/conor-mcnally/sensehat
```

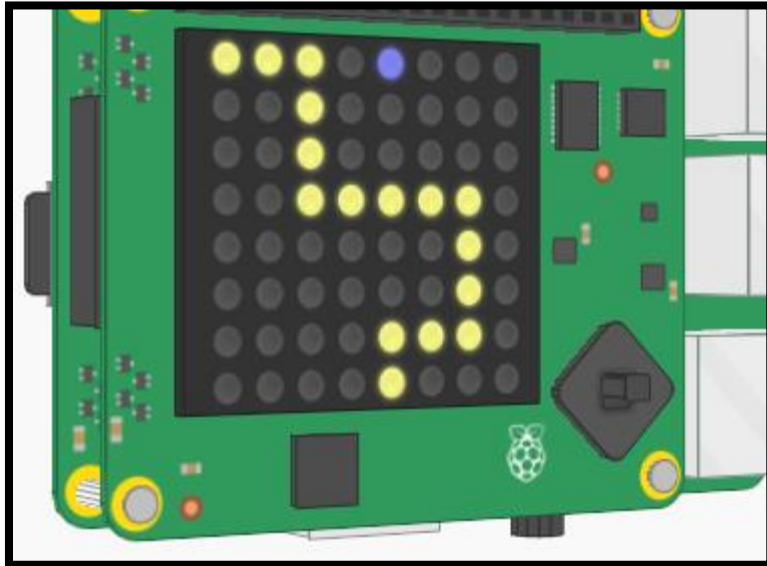
All the files you need are now on the Pi!

Navigate to the tightrope game on your Pi by typing:

```
cd tightrope
```

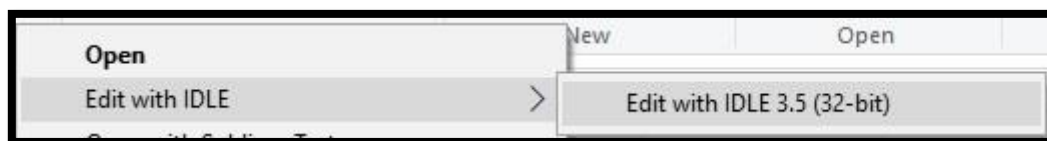
Then run the game by typing:

```
python main.py
```



## Time to hack the game for yourself!

To open the code and hack the game, open the 'main.py' with python's IDLE.



Now that you've downloaded the game and tried it out for yourself, you are now going to hack the Pi to change the game for yourself!

- 1) To change the colour of the path, change the values for the variable Y shown below!
- 2) To change the colour of the pixels around the path, change the X variables values!
- 3) To change the colour of your character, change the B variables values!

```
from sense_hat import SenseHat
from time import sleep

sense = SenseHat()

y = [255, 255, 0]
x = [0, 0, 0]
b = [0, 0, 255]
```

The values are the standard RGB colour values.

(255, 0, 0) = Red

(0, 255, 0) = Green

(0, 0, 255) = Blue

Color Chart	R	G	B	Color Name
	0	0	0	Black
	255	255	255	White
	224	224	224	Light Gray
	128	128	128	Gray
	64	64	64	Dark Gray
	255	0	0	Red
	255	96	208	Pink
	160	32	255	Purple
	80	208	255	Light Blue
	0	32	255	Blue
	96	255	128	Yellow-Green
	0	192	0	Green
	255	224	32	Yellow
	255	160	16	Orange
	160	128	96	Brown
	255	208	160	Pale Pink


## Sick of the current path? Why not make your own!

Below is the code for the path. Each Y value represents the path and each X value represents the dark space around the path which the player needs to avoid!

```
path = [
    y,y,y,x,x,x,x,x,
    x,x,y,x,x,x,x,x,
    x,x,y,x,x,x,x,x,
    x,x,y,y,y,y,y,x,
    x,x,x,x,x,x,y,x,
    x,x,x,x,x,x,y,x,
    x,x,x,x,y,y,y,x,
    x,x,x,x,y,x,x,x
]
```

Remember,  
to replace  
any extra  
Ys with Xs  
instead or  
else your  
code won't  
work!

If you want to slow your game down, change this sleep value so a higher or lower value and see what happens!



```
current = sense.get_pixel(charx, chary)
if current == x:
    charx = 0
    chary = 0
    sleep(0.4)
```