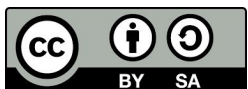
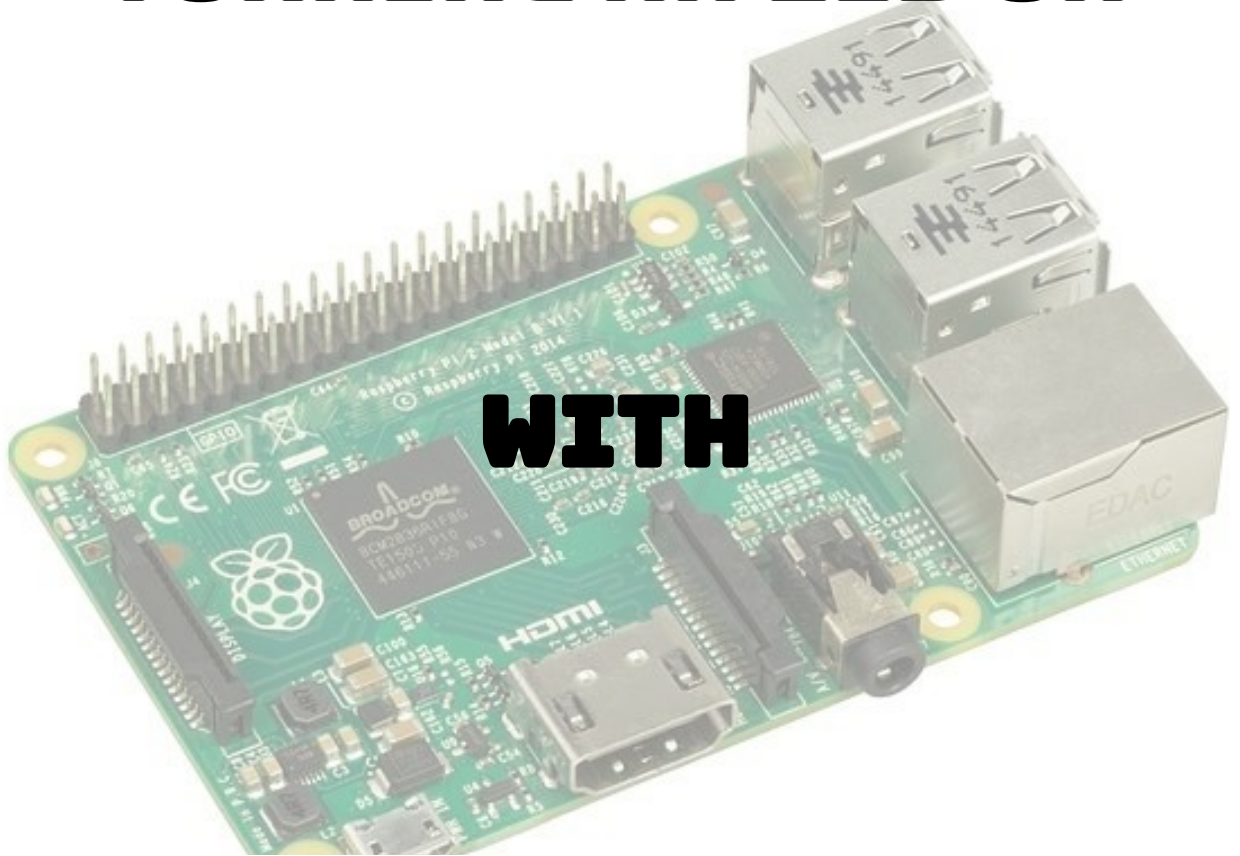




TURNING AN LED ON



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TURNING AN LED ON



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OBJECTIVE

We are going to use a Raspberry Pi and Python to turn an LED on.

GETTING STARTED

To open Python go to Menu -> Programming -> Python 3



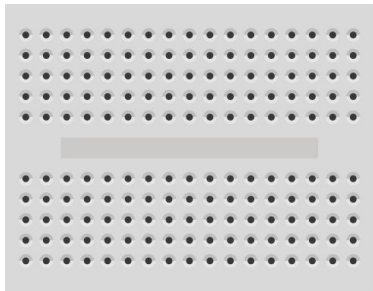
TURNING AN LED ON



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BUILDING THE CIRCUIT

You will need the following electronic components to create the circuit.



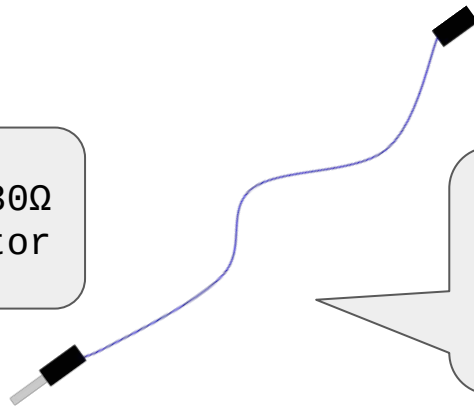
1 x
Breadboard



1 x LED



1 x 330 Ω
resistor



2 x Male to
Female
Jumper wires



TURNING AN LED ON

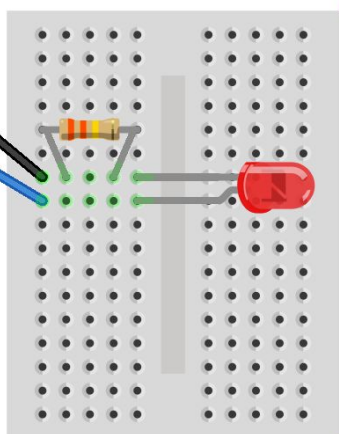
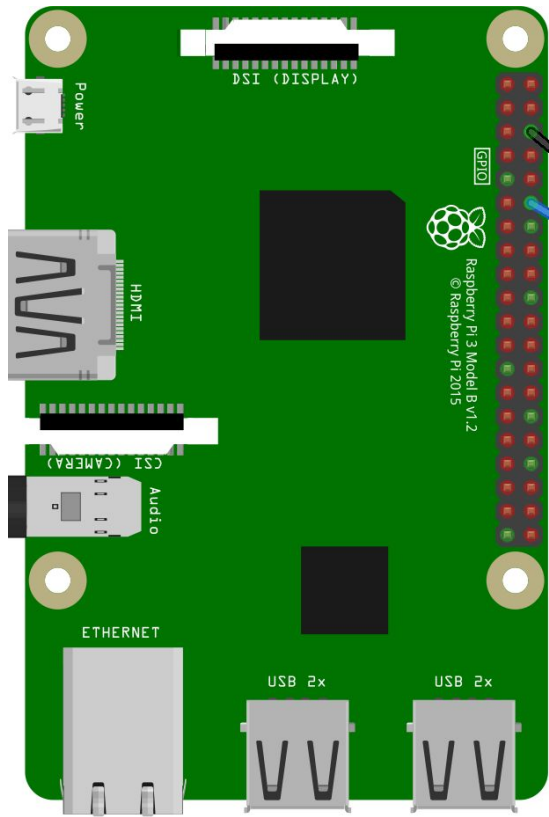


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BUILDING THE CIRCUIT



LEDs have a positive and negative leg. The longer leg is the positive leg. This is shown as the bent leg here.



Negative = GND
Positive = pin 18



TURNING AN LED ON



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CODE

```
from gpiozero import LED # this imports the LED module from the  
gpiozero library  
led = LED(18) # This is declaring pin 18 as the LED  
led.on() # This is turning the LED on
```

You can ignore anything after the “#” as this represents a comment and is telling you what the code does.



TURNING AN LED ON



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RUNNING THE CODE

1. Save your code by clicking on file -> save as.
2. Give your program a name e.g. LED on.
3. To run your code press F5 on your keyboard.
4. You should now see your LED turn on, if not go back and check your circuit and code are correct. This is called Debugging.

CHALLENGE

Try Turning the LED off.

HINT: change the third line of code.