Python Cheat Sheet

Print
Use the print function to get output

```
print('Hello world!')
```

Comments
Comments starts with a #. Pyhton will ignore what you write afterwards.

```
# Writing a comment is as easy as that
```

Variables, Text & Numbers
Variables are used to assign labels to values. Text variables are surrounded single or double quotes.

Text variables

```
msg = 'This is a text'
print(msg)
```

Number variables

```
number = 10 # numbers are written without quotes
print(number)
```

Operators
Operators are used to perform operations on variables and values

Arithmetic operators are used to perform mathematical operations

```
print(2 + 1) # Addition
print(2 - 1) # Subtraction
print(2 * 2) # Multiplication
print(4 / 2) # Division
```

Comparison operators are used to compare two values

```
print(1 == 1) # Equal
print(1 != 2) # Not equal
```

If ... Else
Comments starts with a #, and Python will ignore them

Check if a number is bigger

```
a = 33
b = 200
if b != a:
  print('b is different than a')
```

While
With the while loop we can execute a set of statements as long as a condition is true

Count from one to ten

```
count = 1
while count != 10:
  print(count)
  count = count + 1
```

Infinite While Loop

```
while 1:
  print('this will run forever')
```

Modules
There are several built-in modules in Python, which you can import whenever you like

Time module

```
from time import sleep


sleep(1) # pause the program for 1 second
print('finished')
```

Random module

```
from random import randrange
number = randrange(1, 11) # Generate a random number between 1 and 10
print(number)
```

Built-in LED
Controll the built-in LED

```
from picozero import pico_led


pico_led.on() # Turn the LED on
pico_led.off() # Turn the LED off
```

Internal temperature sensor
Check the internal temperature of the Raspberry Pi Pico in degrees Celcius

```
# Choose View -> Plotter in Thonny to see a graph of the results
from picozero import pico_temp_sensor


while 1:
  print(pico_temp_sensor.temp) # print the internal temperature
```