

## Getting Started with Processing in Python Mode

### ① Is Processing installed on your computer?

No? Download it from [processing.org](https://processing.org). (Note: Your teacher may have another way of getting it)

Yes? Go to Step 2.



### ② Is Processing in Python mode? (Look in the upper right corner, it might say "Java")

No? Click on Java and click Add Mode...

Then install the Python Mode

Yes? Go to Step 3.

### ③ Make your first sketch!

There are two really important parts of a Processing sketch:

```
def setup():
```

```
def draw():
```

setup is where code goes that runs once. In our case, we'll set the size of the window.

draw runs over and over and over and over. This is where we put most of our program.

Here is the first program you should make:

```
def setup():
```

```
    size(400, 400)
```

```
def draw():
```

```
    rect(0, 200, 50, 50)
```

### ④ Changing colours:

Go to Tools... and choose Color Selector. You can use the R, G, B values or the #RRGGBB codes, inside of these commands:

```
background(0, 255, 0) or background("#00FF00")
fill(255, 0, 0) or fill("#FF0000")
stroke(0, 0, 255) or fill("#0000FF")
```

Here's a sample program, building on our old program:

```
def setup():
    size(400, 400)
    background("#037971")

def draw():
    fill("#FE9B1E")
    stroke("#F56A20")
    rect(0, 200, 50, 50)
```

## 5 Adding Text

Use the command:

```
text("Hello", 50, 100)
```

to put basic text on the screen. Note that fill() determines the colour.

Now go explore!

Here is the full program:

```
def setup():
    size(400, 400)
    background("#037971")

def draw():
    fill("#FE9B1E")
    stroke("#F56A20")
    rect(0, 200, 50, 50)
    text("Hello", 50, 100)
```