

# REPEATING



## DESCRIPTION

Like repeating the same steps to every item on a conveyor belt

### 'FOR' LOOPS

Type this example, using **Enter** to start a new line and **Tab** to indent lines. Enter an empty line (deleting any tabs) to finish the procedure.

This **for** loop repeats three indented steps, with **pos** given a new value each time, starting at 0 and stopping at 8. *What will it do when you run it?*

```
for pos in range(0, 8):
    clearPixels()
    setPixel(pos, red)
    sleep(1)
```

### 'WHILE' LOOPS

This **while** loop checks if a condition is true then repeats the indented steps.

**1==1** checks if **1** is the same value as **1**. This will always be true so the steps will repeat forever.

*What effect will these steps create?*

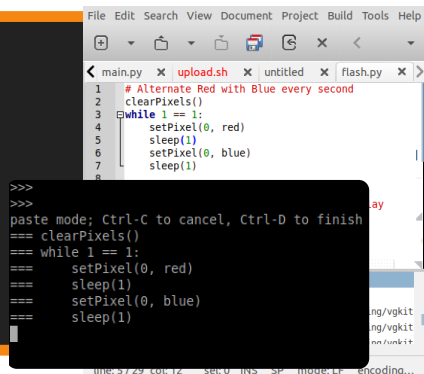
```
clearPixels()
while 1 == 1:
    setPixel(0, red)
    sleep(1)
    setPixel(0, blue)
    sleep(1)
```

### USING A TEXT EDITOR

To make changes more easily, keep your code in a python-aware text editor like Geany. After you've made any changes you can copy-paste it into the REPL to run it.

### PASTE MODE

First copy the text of your code with the mouse. Then begin paste mode in the REPL by pressing **CTRL+E**. Paste your code with the mouse. Finally, end paste mode to run your script by pressing **CTRL+D**.



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