Loops

Computers are GREAT at doing something over and over again! If we want code to *repeat*, we use something called a loop.

Some Review…

It's been a while, but use Sublime Text and your terminal for this section! You can call your file `loops.py`

Try running this two line program:

```python
for i in range(5):
  print(i)
```

1. What happens?
2. What happens if you change it to `range(2,5)`?
3. What happens if you change it to `range(2,5,2)`?
4. What happens if you change it to `range(5,2,-1)`?
5. In your own words, explain what each **parameter** of the `range` function is.
6. Write the code for a loop that will print the numbers all the **odd** numbers from 1 to 99.
7. Write the code for a loop that will print all multiples of 50 from 0 to 500.
   (How might this be useful for Processing?)
8. Write a **function** named `say_hi` that prints `Hello` 8 times.
9. Write a function named `say_hi_more(n)` that prints `Hello` n times.

Processing Practice

For sake of ease, make your canvas `500x500`.

1. In `setup()`, use `for` loops to draw a grid on your canvas. Each square should be `50x50`.
2. In `setup()`, use `for` loops to draw diagonal lines across the canvas. This should look like an `X` in each square.