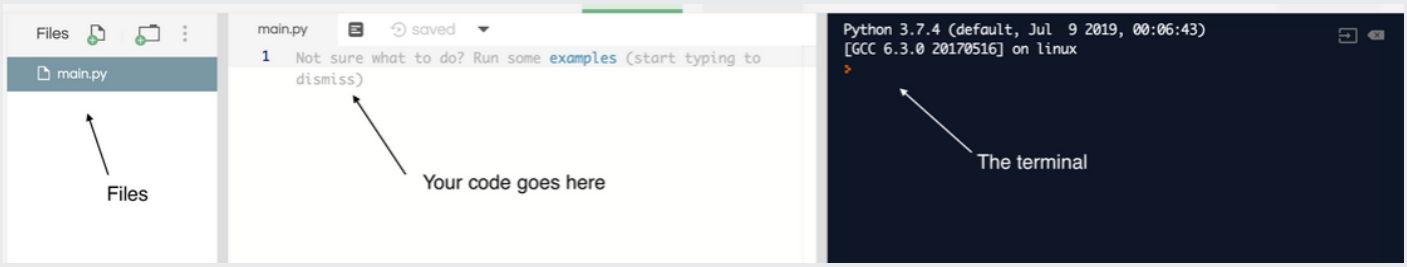
Cipher Messages!

Make a secret message generator

Get started

1. Go to **repl.it**. Click on the **+ new repl** button. Choose **Python** for the language and create!

2. There are three windows: The first is for **files** which are Python's Sprites
   The second is for your **code**
   The third is your **terminal** which is Python's Stage



What's the message?

1. Let's ask the user! `print("What's the message")`

2. You need to listen for their answer `message = input()`

Python needs all text to be in **quotation marks** - "". We call this a **string**.

Do you recognise **message.**
It's a **variable.**

What is a Ceaser Cipher?

A **Ceaser Cipher** is a way of hiding what you are writing. We shift each letter to the one next to it.

E.g: A becomes **B,** and **N** becomes **O**

Hiding the message

1. You're going to need the alphabet! You can use a **list**

```
letters = [" ", "a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o", "p", "q", "r", "s", "t", "u", "v", "w", "x", "y", "z"]
```

2. You're going to need a new **variable** for the new message. Set it to an empty **string**.

```
encoded = ""
```

3. You'll need to break your message into single letters. You can use a **for loop**.

```
for letter in message:
    |
```

How does Python know if code in in the **for loop**? We use **spaces**. Code inside the **for loop** is two spaces in.

4. To **shift** the letters you'll need their position - we call this the **index**

```
index = letters.index(letter) + 1
```

Then just add one!

5. Now we add the new letter to our empty **string**

```
encoded += letters[index]
```

We use **square brackets** [ ] to get a letter by its position in our **list**

6. All that's left now is for you to print the new message!

```
print(encoded)
```

Challenge time!

What if you put a **z** in your message or a capital letter. Oh No! An error. Can you fix it? You may need a mentor's help

Can you **decode** messages, try this: **qzuipoajtatpanvdiagvo**