

In this project you will learn how to write a Python program telling people all about you.

[illegible]

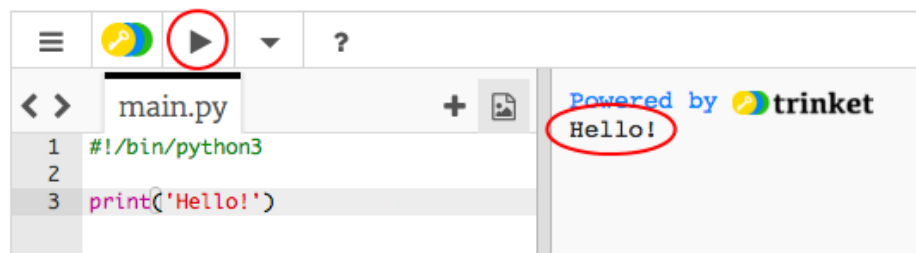
Let's start by writing some text.

- Open the blank Python template Trinket: [jump.to/cc/python-new](http://jump.to/cc/python-new) (<http://jump.to/cc/python-new>).
- Type the following into the window that appears:

```
< > main.py
1 #!/bin/python3
2
3 print('Hello!')
```

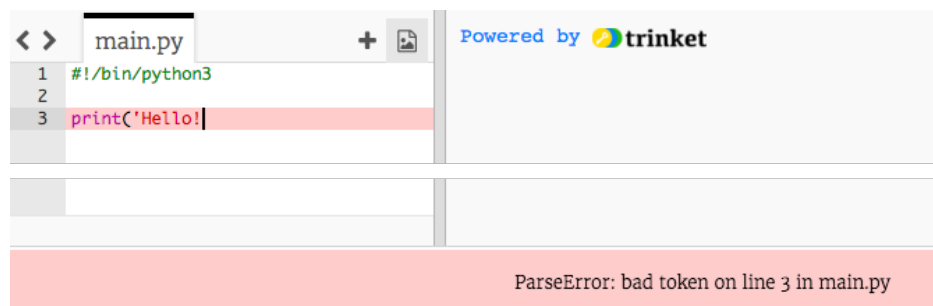
The line `#!/bin/python3` just tells Trinket that we're using Python 3 (the latest version).

- Press 'run', and you should see that the `print()` command prints everything between the quote marks `"`.



- If you make a mistake, you'll get an error message instead - telling you what went wrong!

Try it! Delete the end quote `'` or the closing bracket `)` (or both) and see what happens.

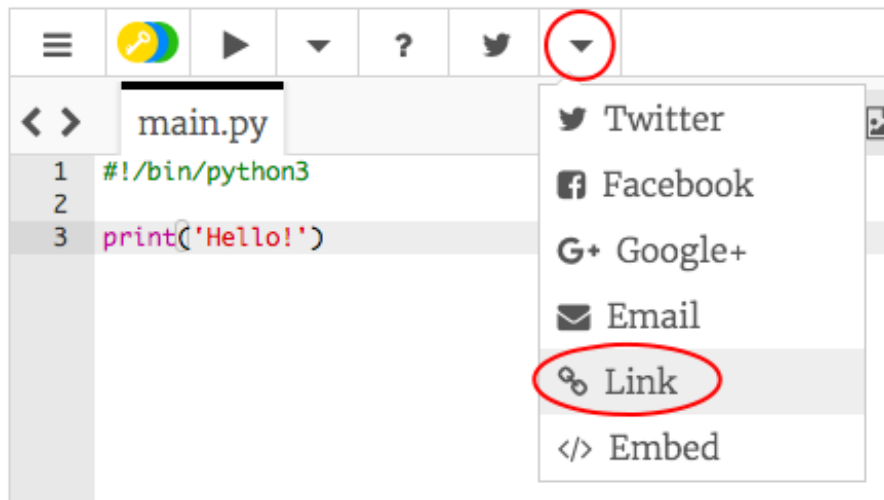


- Replace the quote or bracket and click 'run' to make sure your project works again.

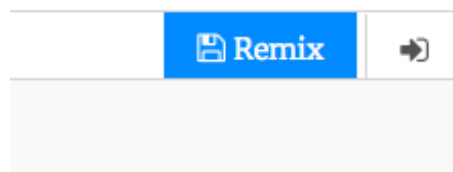
## Save Your Project

## You don't need a Trinket account to save your projects!

If you don't have a Trinket account, click the down arrow and then click 'Link'. This will give you a link that you can save and come back to later. You'll need to do this every time you make changes, as the link will change!



If you have a Trinket account, you can click 'remix' to save your own copy of the Trinket.



## Challenge: What's on your mind?

Change the code above, to print something more interesting about you!

```
Hi, I can code in Python!
```

## Save Your Project

### Step 2: ASCII art

Let's print something much more fun than text... ASCII art! ASCII art (pronounced 'ask-e') is creating **pictures out of text**.

### Activity Checklist

- ☐ Let's add some art to your program - a picture of a dog!

```
#!/bin/python3

print('Hello!')

print('Here's a picture of a dog:')
print(' o____ ')
print('  |||  ')
```

- ☐ If you click 'run', you'll see that there's a bug in your new code.

```
print('Here's a picture of a dog:')
print(' o____ ')
print('  |||  ')
```

That's because your text contains a quote, which Python thinks means the end of the text!

```
print('Here's a picture of a dog:')
```

- ☐ To fix this, just put a backslash \ before the quote in the word `here's`. This tells Python that the quote is part of the text.

```
#!/bin/python3

print('Hello!')

print('Here\'s a picture of a dog:')
print(' o____ ')
print('  |||  ')
```

```
Hello!
Here's a picture of a dog:
 o____
  |||  
```



If you prefer, you can use 3 quotes `'''` instead of 1, which allows you to print multiple lines of text with 1 `print` statement:

```
#!/bin/python3

print('Hello!')

print('''
Here's a picture of a dog:
 o____
  |||
''')
```

```
Hello!

Here's a picture of a dog:
 o____
  |||  
```

## Save Your Project

## Challenge: About yourself

Write a Python program to tell others about yourself, by using text and ASCII art. You can create images of your hobbies, friends... or anything you like!

**Remember that the code you write in Trinket is public.**  
**Don't share any personal information like your full name or address!**

Here's an example:

```
My favourite animals are sheep
```

```
o-###-  
| | #
```

```
I live in Glasgow
```

```
  |  
-|-  
#  
  |  
#  
-|-  
#  
  |  
#  
-|-
```

## Save Your Project

### Step 3: The Year 2025

You can also do calculations and print numbers. Let's find out how old you'll be in the year 2025.

### Activity Checklist

- ☐ To calculate how old you'll be in the year 2025, you need to subtract the year you were born from 2025.

Add this code to your program:

```
print('''  
Here's a picture of a dog:  
o----  
||||  
''')  
  
print(2025 - 2006)
```

Notice that you don't need to put quotes around numbers.

(You'll need to change the number `2006` if you were born in a different year.)

- Click 'run' and your program should print your age in the year 2025.

```
#!/bin/python3

print('Hi, how are you?')

print('Hello!')
Here's a picture of a dog:
  o____
  ||||
  '''

print(2025 - 2006)
```

```
Hello!

Here's a picture of a dog:
  o____
  ||||
  19
```

- You could improve your program by using `input()` to ask the user their age and store it in a **variable** called `born`.

```
Here's a picture of a dog:
  o____
  ||||
  '''

born = input('What year were you born?')
print(2025 - born)
```

- Run your program and then enter the year you were born. Did you get another error message?

That's because anything typed into your program is **text**, and it needs to be converted to a **number**.

You can use `int()` to convert the text to an **integer** ('integer' means 'whole number').

```
print('')
Here's a picture of a dog:
  o____
  ||||
  '''

born = input('What year were you born?')
born = int(born)
print(2025 - born)
```

```
  o____
  ||||

What year were you born? 2004
21
```

- You can also create another variable to store your calculation, and print that instead.

```
print('''
Here's a picture of a dog:
  O____
  ||||
''')

born = input('What year were you born?')
born = int(born)
age = 2025 - born
print(age)
```

```

  O____
  ||||
What year were you born? 2005
20
```



Finally, you can make your program easier to understand by adding a helpful message.

```
born = input('What year were you born?')
born = int(born)
age = 2025 - born
print('In the year 2025 you\'ll be', age, 'years old!')
```

```

What year were you born? 2006
In the year 2025 you will be 19 years old!
```

## Save Your Project

## Challenge: Your age in dog years

Write a program to ask the user their age, and then tell them their age in dog years! You can calculate a person's age in dog years by multiplying their age by 7.

```

What is your age? 9
If you were a dog, you'd be 63 !!
```

```

  O____
  ||||
```

In programming, the symbol for **multiplication** is `*`, and is usually **shift+8** on the keyboard.



## Save Your Project

### Challenge: Calculating text

Did you know that you can also calculate text?!

What does the following program print to the screen? See if you can guess correctly before running the program.

```
print('ha ' * 4)
print('ba' + 'na' * 2)
print('Hello' + '!' * 10)
```

Can you make up any words of your own? You could even make your own patterns!

```
print('Here is a scarf:')
print('~#' * 10)
print('#' * 10)
print('Here is a wave:')
print('/\ ' * 10)
print(' \ ' * 10)
```

```
Here is a scarf:
~#~#~#~#~#~#~#~#
~#~#~#~#~#~#~#~#
Here is a wave:
/\ /\ /\ /\ /\ /\ /\ /\ /\ /\ /\
 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
```

## Save Your Project