

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.

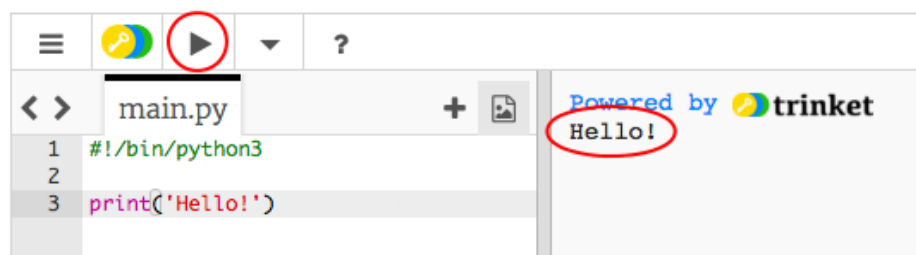
✔ Activity Checklist

- ☐ Open the blank Python template Trinket: jump.to/cc/python-new.
- ☐ Type the following into the window that appears:

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

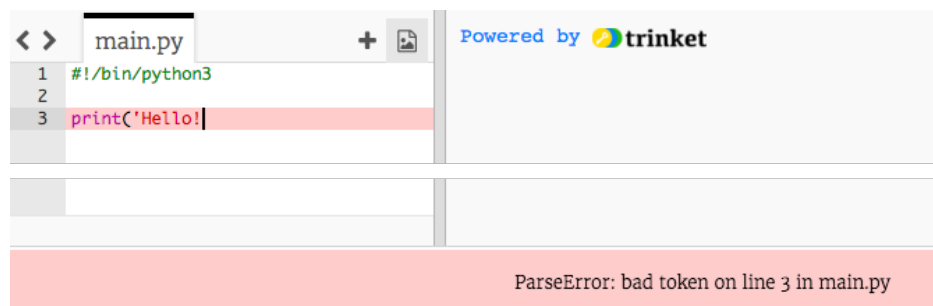
The line `#!/bin/python3` just tells Trinket that we're using Python 3 (the latest version).

- ☐ 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.

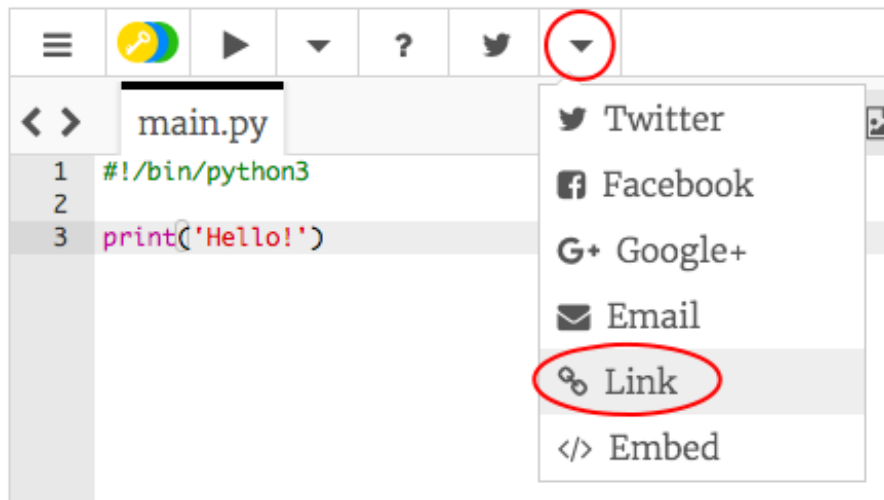


- ☐ Replace the quote or bracket and click 'run' to make sure your project works again.

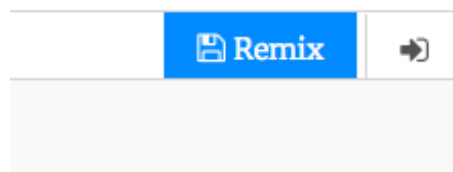
Save Your Project

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('v^' * 10)
```

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

Save Your Project