

# Assignment 0: Setup & Submission Practice

Chris Low

This assignment will help me learn how to submit assignments as a pdf using Quarto.

Code cells can be created using three backticks followed by {python}.

## C1. Hello World

```
print("Hello World!")
```

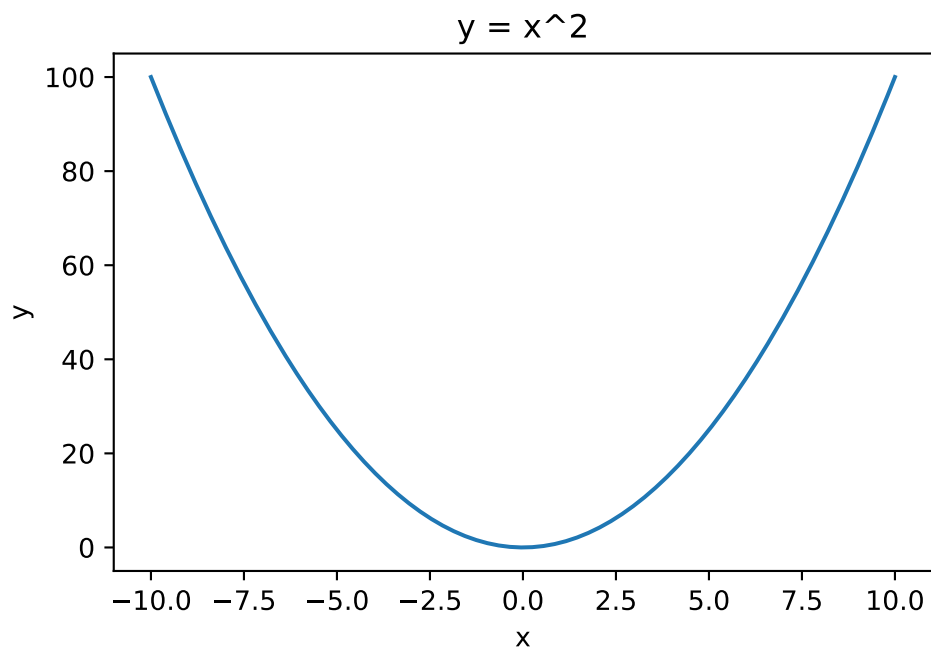
Hello World!

## C2. Plot $y = x^2$

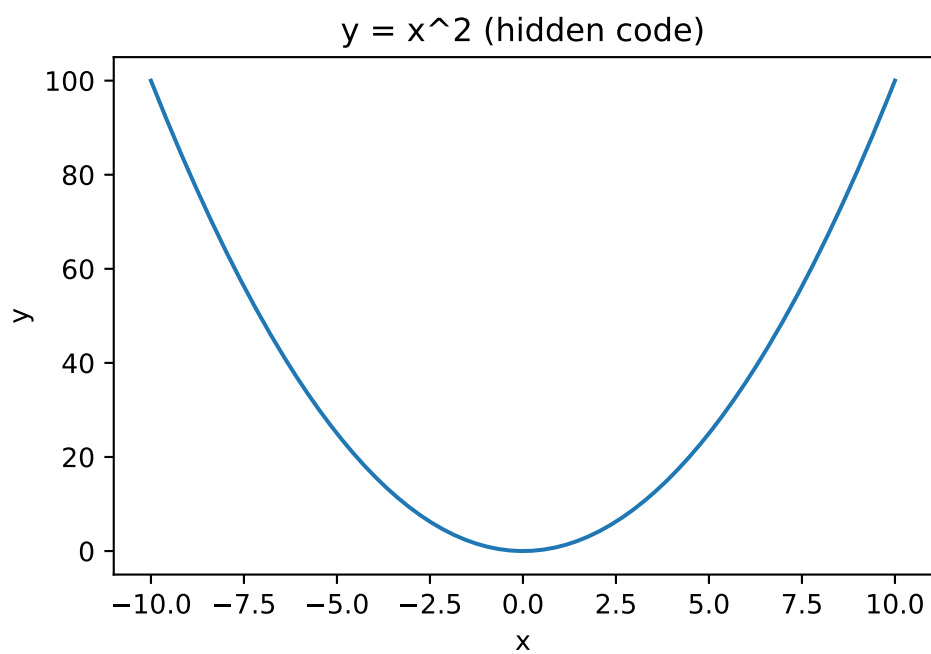
```
import numpy as np
import matplotlib.pyplot as plt

x = np.linspace(-10, 10, 200)
y = x**2

plt.plot(x, y)
plt.xlabel("x")
plt.ylabel("y")
plt.title("y = x^2")
plt.show()
```



**C3. Plot  $y = x^2$  (code hidden)**



## Part D: LaTeX practice (math + formatting)

### D1. Inline math

The mean of the numbers  $x_1, x_2, \dots, x_n$  is given by  $\frac{1}{n} \sum_{i=1}^n x_i$ .

### D2. Display math

The quadratic formula is given by:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.$$

### D3. Aligned equations

$$\begin{aligned}(x+1)^2 &= (x+1)(x+1) \\ &= x^2 + 2x + 1\end{aligned}$$

### D4. LaTeX symbols

The symbol  $\nabla$  denotes the gradient operator, which represents the vector of partial derivatives of a scalar-valued function.