



## Magic Methods

Below you'll find the same code from the previous exercise except two more methods have been added: an **add** method and a **repr** method. Your task is to fill out the code and get all of the unit tests to pass. You'll find the code cell with the unit tests at the bottom of this Jupyter notebook.

As in previous exercises, there is an answer key that you can look at if you get stuck. Click on the "Jupyter" icon at the top of this notebook, and open the folder 4.OOP\_code\_magic\_methods. You'll find the answer.py file inside the folder.

```
In [13]: import math
import matplotlib.pyplot as plt

class Gaussian():
    """ Gaussian distribution class for calculating and
    visualizing a Gaussian distribution.

    Attributes:
        mean (float) representing the mean value of the distribution
        stdev (float) representing the standard deviation of the distribution
        data_list (list of floats) a list of floats extracted from the data file

    """
    def __init__(self, mu = 0, sigma = 1):

        self.mean = mu
        self.stdev = sigma
        self.data = []

    def calculate_mean(self):

        """Method to calculate the mean of the data set.

        Args:
            None

        Returns:
            float: mean of the data set

        """

        #TODO: Calculate the mean of the data set. Remember that the data set is
        # Change the value of the mean attribute to be the mean of the data set
        # Return the mean of the data set
        average = sum(self.data) / len(self.data)
```