

1. Create a univariate object and try out some of the available methods.
2. Methods to calculate the range and median were planned but not implemented.
 - a. Implement one or both of these methods and check they work correctly.
 - b. Update the `print_summary` method so that the median and range are printed when this method is called.
3. Magic methods / dunder (double **underscore**) methods. See [Special method names](#).
 - a. Try using the `print()` function on an instance of the Univariate class. The output isn't particularly useful.
 - b. Have a quick look at the `__str__` method in the documentation. Implement your own `__str__` method for the Univariate class. You may do this however you please, but one option is to ask Python to print the 'data' attribute associated with an instance of Univariate.
 - c. Run `print()` again on an instance of the Univariate class. Is the output more useful?
 - d. What is the difference between the `__str__` and `__repr__` dunder methods?
4. More magic: addition.
 - a. Create two numpy arrays (say, `x` and `y`) and then add them (`x+y`).
 - b. Create two Univariate objects and add them using the '+' symbol. What is returned?
 - c. Let's imagine we want addition to represent the concatenation of the underlying datasets (this is contrived at best, but I couldn't think of a better example in this context). For example, if `u` and `v` represent the data `{1,2,3}` and `{4,5}`, then `u+v` should represent the data `{1,2,3,4,5}`. Implement an `__add__` method for the Univariate class.
 - d. The binary operator '+' behaves differently depending on the input objects. Which OOP concept does this relate to? (Hint: check Adam's MF learning slides)
5. Bonus: Break the Univariate class
 - a. Identify problems, edge cases, poor design choices, etc.
 - b. Are there practices or Python features/libraries which can help fix any of the above?
6. Bonus: Can you think of a class or concept that we could build to help learn good programming practices? For example, we might create a `SimSurvey` class which reads a sampling frame provided by the user, simulates survey sampling, and calculating estimates under different sample designs.
7. Bonus: Tinker with conda and see what you can make it do.