

DS 542 Assignment 8

Before this assignment, please make sure to watch the Week 8 Class Recording and review the notes from this week's "Resources" folder.

1. First, open a new .py file in Spyder.
2. Inside that .py file, create a class named `University`
 - a. Create a constructor function (`__init__`) in the `University` class that takes the following attributes as parameters:
 - i. `university_name`
 - ii. `location`
 - iii. `undergraduate_students`
 - iv. `graduate_students`
 - b. Next, create a method within the `University` class called `print_university_size()` that prints the sum of the attributes `undergraduate_students` and `graduate_students`
 - c. Then, create a method within the `University` class called `is_undergraduate_greater()` that prints "There are more undergraduate students than graduate students" if `undergraduate_students > graduate_students` and "There are more graduate students than undergraduate students" if `undergraduate_students <= graduate_students`
 - d. Lastly, create an object of the `University` class named `SPU`. Define the attributes of `SPU` to match the actual attributes of Saint Peter's University. Run both the `print_university_size()` and `is_undergraduate_greater()` methods on the `SPU` object.
3. (Bonus Question) For 3 extra points on this assignment, create a second class named `College` that uses inheritance to utilize all the attributes and methods from `University`. Then, add at least one new method to `College` and run that method on an object.

Note: Please save your document as your first initial last name Assignment Number (John Smith's submission would be titled – JSmithAssignment8.py).

Upload your assignment to Blackboard