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| ***MODULE*** | | 02 | | | |
| ***TOPIC(S)*** | | Algorithm analysis (growth rate) + Classes and objects in Python | | | |
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| **--- PRECLASS ---** | | | | | |
| **SHORT VIDEO** | <Algorithm> analysis: https://goo.gl/IXB8QY  (Warning: code examples are in the “C” programming language) | | | |  |
| **BOOK** | GTG Chapter 3 (until p. 134, skip from 3-way disjointness onwards) | | | |  |
| **QUIZ** | ADSA Quiz Week 02 at <https://goo.gl/forms/brGLVFlOUF88BiEH2> | | | |  |
| **--- PROBLEM SET 1 (Tuesday, Sep 6th) ---** | | | | | |
| PyCharm: module02.part01 >>> **compare\_exec\_times.py** | | | | | |
| **--- POST-CLASS 1 ---** | | | | | |
| **TO-DO** | Complete Problem Set 1 in PyCharm | | | |  |
| **SHORT VIDEO** | Basics of object-oriented programming in Python (classes) <https://goo.gl/zLu0Fy> | | | |  |
| **BOOK** | GTG Chapter 2 – Section 2.2 (CreditCard Class example)  (The entire chapter discusses in depth object-oriented programming in Python) | | | |  |
| **--- PROBLEM SET 2 (Thursday, Sep 8th) ---** | | | | | |
| PyCharm: module02.part02 >> **student\_manager.py**  You have to complete the implementation of the class Student, which is a simple student management application implementing the following methods:  1) Add a new grade for a given course, e.g. ‘Finance 101’: ‘B-‘  2) Calculate and print the GPA of the student  3) Print the list of courses and grades achieved by a student Students are identified by their name (= full name) and student id. | | | | | |
| **ADDITIONAL RESOURCES** | | | | | |
| <http://www.tutorialspoint.com/python/python_classes_objects.htm> (Employee class example) | | | | | |
| **POST-CLASS 2** | | | | | |
| Complete Problem Set 2 in PyCharm | | |  |  |  |