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| ***Computer Science 2061 -*  ASSIGNMENT #8** | |
| **Program** | **Description** |
|  | Using the starter file Assn 08 Pr 01 Start.py, write a program that completes the four classes and produces the output as shown below. **Please note! You cannot delete anything in the starter file. You must add to the starter file and complete the code already there. Also, you cannot add anything to main().** Please complete the program to meet the following additional requirements:   * The Time and Date classes are base classes. * The MilitaryTime and DateTime classes are derived from Time and Date. * MilitaryTime class:   + Uses military time which uses a 24 hr clock. For example 2236 is 10:36 PM.   + Has two attributes: militaryHours (e.g. 2236 = 10:36 PM) and militarySeconds (22 = 22 seconds)   + Is derived from the Time class (i.e. inherits from the Time class)   + convertToStandard() method takes the two militaryTime attributes and converts them to the three Time attributes   + showStandardTime() method calls the showTime() method of the Time class   + A good source to review classes and inheritance is: <https://en.wikibooks.org/wiki/A_Beginner%27s_Python_Tutorial/Classes> * DateTime   + Is derived fromboth the Date and Time classes.   + It’s constructor calls the constructors of the Date and Time classes.   + showDateTime() calls the Date and Time show functions   + For an example of multiple inheritance see: <http://www.python-course.eu/inheritance_example.php> |

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|  | **Execution Listing** |
| *>>>*  *Standard time:*  *(8, 36, 0, 'PM')*  *8:36:0 PM*  *Standard date:*  *(13, 10, 2015)*  *November 13, 2015*  *Date time:*  *(8, 36, 0, 13, 10, 2015)*  *8:36:0 PM*  *November 13, 2015*  *Military time:*  *(2236, 22)*  *2236:22 hours*  *10:36:22 PM* |

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| **Notes** |
| 1. In the execution listing, numeric values don’t have to appear exactly as shown above. For example, $44.50 is OK instead of $44.5. 2. Make sure that you use good programming style and documentation. 3. **USE VARIABLES FOR ALL VALUES IN THE PROGRAM**. 4. Unless instructed otherwise, always use the test data described in the problem. 5. Unless instructed otherwise, copy and paste your execution and code listings into the *Homework Template* document. Please ensure that:    * Problems are in the order listed on the assignment sheet (I.E. Program #1 first, Program #2 second, etc.)    * The execution listing corresponds with the code listing. In other words, the code listing will produce the execution listing. If it does not, no credit will be received for that problem. 6. The work you submit must be your own. Please note that any of the following actions are considered cheating:    * Electronically copying or inserting any code that you did not create.    * Manually copying or inserting any code that you did not create. |