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| ***Computer Science 2061 -*  ASSIGNMENT #2** | | |
| **Program** | Description | **Execution Listing** |
|  | Write a program that uses three variables: *a,b,c*. First, assign the values 5 and 3 to *a* and *b*. Then, do the math operations as shown in the execution listing to the right and display the results. Always first assign the result of the operation to c and then include the c in the output string to display the result. So for example if you needed to do subtraction you would have *c = a – b.* Any numbers in the output should be displayed from variables and not as characters. | *a and b are 5 and 3*  *a divided by b is 1.6666666666666667*  *a divided by b but rounded to two places is 1.67*  *a divided by b using integer division is 1*  *a modulus b is 2* |
|  | Write a program that creates a tuple, list and dictionary as shown to the right and then sorts, modifies and displays them as shown. Use the variable namse *t,l* and *d* to reference the tuple, list and dictionary. Hint: when defining the dictionary, use the first approach shown in the video:  d = { ‘one’: 1, ‘two’:2 …}  instead of the second approach. | *First a tuple!*  *<class 'tuple'> ('one', 'two', 'three', 'four')*  *tuple sorted: ['four', 'one', 'three', 'two']*  *Next a list.*  *<class 'list'> [3.3, 1.1, 2.2]*  *list with two new values inserted! [0.0, 3.3, 1.1, 2.2, 4.4]*  *list sorted: [0.0, 1.1, 2.2, 3.3, 4.4]*  *And last but not least, a dictionary!*  *<class 'dict'> {33333333: 'Carol Carolson', 22222222: 'Bill Billson', 11111111: 'Ann Annson'}*  *dictonary sorted:*  *11111111 Ann Annson*  *22222222 Bill Billson*  *33333333 Carol Carolson* |

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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. 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. |