**Unit 14 Assignment Instructions – CIS164** 

*For the Unit 14 Assignment we will be using Python for a task within the Cybersecurity realm.*

*Please make sure to fully read each question to ensure that you answer each question per the requirement. Also, please ensure that all responses are in complete sentences, free of spelling and grammatical errors.*

**\*Unit 14 Grading Rubric (45 Points):**

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| --- | --- | --- |
| **Assignment Requirements** | **Maximum Points** | **Points Earned** |
| 1. Python for Cybersecurity | **0-45 Points** |  |
| **Points Deducted for Spelling or Grammatical Errors** | |  |
| **Total (Sum of All Points)** | |  |

**\*Directions for Submitting Your Assignment:**

Complete your assignment ensuring all questions are answered based on the assignment requirements. When the Unit 14 assignment is complete, please save your file in the following format, *“Lastname-Unit#.doc”* (Example: **Smith-Unit14.doc**). You may also utilize a Word Processing software such as LibreOffice for assignment completion. In this case the assignment may be saved in .odt format, (Example: **Smith-Unit14.odt**). Then when ready submit your file to the “**CIS 164 – Unit 14 Submit Assignment**” activity for grading.

**1. Python for Cybersecurity**

1. Start the PyCharm IDE. Select “File->New Project” on the next screen, then under “Location” change the word “untitled” to “Unit14”. Then click the “Create” button.
2. Highlight your project “Unit14” then right click. When you right click a menu will appear, from this menu select New->Python File. Then a dialog box will appear, in the “Name” field of the dialog box type “Unit14Password.py”.
3. For your script you will need to get input from a user, which will ask them to enter a password to be reviewed. This needs to be outside of your functions that you will create for your script. You will be passing the value of the user’s password entered as a parameter value to your functions.
4. You will be creating four separate functions, you will have one function that verifies whether the user’s password contains at least three digits.
5. You will have one function that will verify that the user’s password contains at least three lower case characters.
6. You will have one function that will verify that the user’s password contains at least three upper case characters.
7. You will also have one function that will verify that the user’s password contains at least three special characters.
8. If the user’s password that they entered does not meet the requirements of having 3 numbers, 3 lowercase, 3 uppercase, and 3 special characters, your script should tell them that the password they entered does not meet the minimum requirements. It should also tell them the area that does not meet the requirement. For example, if the user enters the password of 123qweASD!, the script should state that the password does not meet the requirement of having three special characters. If the password does meet all requirements the script should tell them, ‘The password entered meets all requirements!’
9. For your script, you will need to provide a screenshot showing your completed script being run with a password that meets all requirements and with a password that does not meet all requirements. You will also need to submit your code within the Assignment Instructions, or in a text file when submitted.