1. To run program 1, run the python file titled “singleLetterShannonEntropyCalc.py”. I personally right click on the file, then select “Edit with IDLE”, which brings up the code. If you wish to change the input text file, edit the line 3 of the program. To run the program, press F5 or select Run->Run Module on the menu bar. Follow the prompt on the screen to input the number you wish to shift the text by, then wait until the prompt returns (displays ‘>>>’) before opening the written file which contains the entropy, as titled on line 4 of the program as "sherlockTextEntropy.txt".
2. To run program 2, run the python file titled “PlaintextSubstitutionCipherEncryption.py”. I personally right click on the file, then select “Edit with IDLE”, which brings up the code. If you wish to change the input text file, edit the first line of the program. To run the program, press F5 or select Run->Run Module on the menu bar. Wait until the prompt returns (displays ‘>>>’) before opening the written file which contains the substituted text, as titled on the second line of the program as " SingleSubstitutedFile.txt".
3. To run program 3, run the python file titled “PlaintextDoubleSubstitution.py”. I personally right click on the file, then select “Edit with IDLE”, which brings up the code. If you wish to change the input text file, edit line 3 of the program. To run the program, press F5 or select Run->Run Module on the menu bar. Wait until the prompt returns (displays ‘>>>’) before opening the written file which contains the ciphertext, as titled on line 4 of the program as "DoubleSubstitutedFile.txt".
4. To run program 4, run the python file titled “blockShannonEntropyCalc.py”. I personally right click on the file, then select “Edit with IDLE”, which brings up the code. If you wish to change the input text file, edit line 6 of the program. Currently, I am using a simple text input file. To run the program, press F5 or select Run->Run Module on the menu bar. Wait until the prompt returns (displays ‘>>>’) before opening the written file which contains the ciphertext, as titled on line 7 of the program as "sherlockTextEntropyForBlocks.txt".