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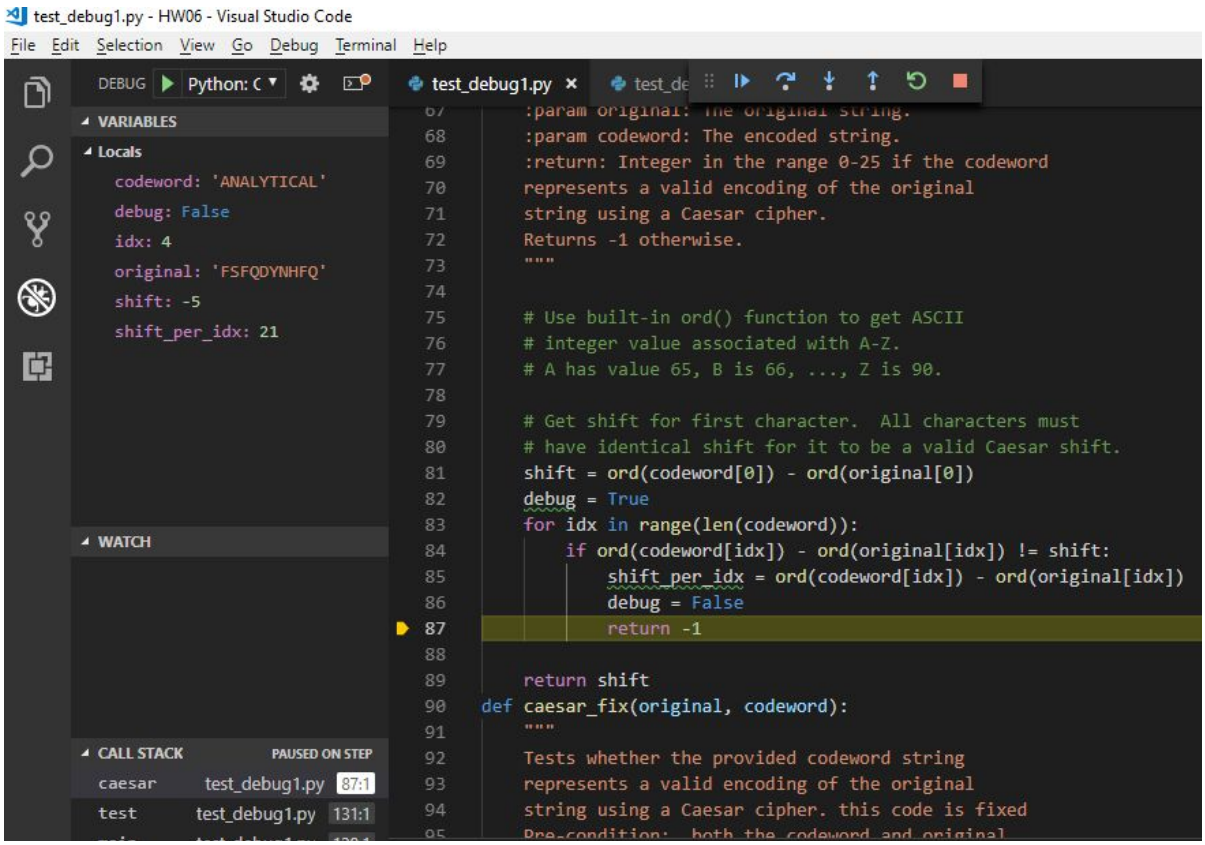
10/6/18
Comp Sci HW06

Test_debug1:

Example one:
Encoded word: WNLMY
Original word: RIGHT
The reason why this example runs through the faulty program without any errors is because every single shift between the original word and encoded word is the same shift greater than zero. There isn't a shift that isn't less than zero, so every single shift is the same.

Example two:
Encoded word: ABCD
Original word: WXYZ
The reason why this example runs through the faulty program without any errors is because every single shift between the original word and encoded word is the same shift less than zero. There isn't a shift that isn't greater than zero, so every single shift is the same.

The bug is that when a shift that is less than zero could be equal to a shift greater than zero, but the two shifts can't be compared to each other. The way to fix this bug is that every single time there is a shift less than zero, add 26 to the shift.



Test_debug2:

Example one:
String1 = looped
String2 = poodle
The reason why this example runs through the faulty program without any errors is because the two strings are the same exact length and the longest consecutive matching substring is not at the end of the string

Example two:
String1 = lpoof
String2 = fpool
The reason why this example runs through the faulty program without any errors is because the two strings are the same exact length and the longest consecutive matching substring is not at the end of the string

The bug is that when the program reaches the end of the string, it doesn't stop. The program continues running and tries to compare the next character in the string, so there is a string index out of range error. To fix this error, you need to compare whether the index plus the consecutive matching substring length is greater than or equal to the length of the string. If it is greater than or equal to the length of the string, then it should return the longest consecutive matching substring length instead of continuing to run the function.