vig\_encryption

Tig_onorypaon			
Purpose	Encrypt a message with a given key following the Vigenere Cipher rules		
Assumptions	<ul> <li>All input must be uppercase alphabetic letters</li> <li>We are treating A=0 through Z=25.</li> <li>Additionally a SPACE is treated as 26</li> </ul>		
Input	Message to be encrypted, key that will be used to encrypt		
Output	Correctly encrypted ciphertext		
State Changes	None		
Base cases and expected behavior	Needs to make sure that the length of key is less than the length of the message		

vig\_decryption

Purpose	Decrypt a message with a given key following the Vigenere Cipher rules		
Assumptions	<ul> <li>All input must be uppercase alphabetic letters</li> <li>We are treating A=0 through Z=25.</li> <li>Additionally a SPACE is treated as 26</li> </ul>		
Input	Message to be decrypted, key that will be used to decrypt		
Output	Correctly decrypted ciphertext		
State Changes	None		
Base cases and expected behavior	Needs to make sure that the length of key is less than the length of the message		

## vigenere

Vigeriere	<del>i</del>		
Purpose	Get a valid key from the user and then call the correct encryption or decryption function. It will also output all related text to the terminal and to a text file		
Assumptions	<ul> <li>All input must be uppercase alphabetic letters</li> <li>We are treating A=0 through Z=25.</li> <li>Additionally a SPACE is treated as 26</li> <li>That mode is either the words "ENCRYPT" or "DECRYPT"</li> <li>Assuming that the message is legal input</li> </ul>		
Inputs	"String mode" which is either the word "ENCRYPT" or "DECRYPT" and the message to use.		
Outputs	NA		
State Changes	None		
Base cases and expected behavior	This function is getting a key from the user and turning it to uppercase letters. It is also going to make sure that the key is less than the message in length. Ans its going to output the message,key, and cipher/plaintext to the terminal and to textfiles.		

## vigenere testing

Purpose	Unit testing to make sure the encryption and decryptiong functions are working as expected	
Assumptions	Is passing text that is already legal (uppcase letters only)	
Inputs	NA	
Outputs	NA	
State Changes	None	
Base cases and expected behavior	Will check to make sure the plaintext or ciphertext that is outputted is correct. Will output to terminal text that either says "passed" or "failed" depending on the results.	