Terminal (left window):

```
dan@dan-Alienware-m15: ~/Documents/School/CIS110/Projects/Wk5

File   Edit   View   Search   Terminal   Help

dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk5$
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk5$ python3 dominguez_program5.py
This program uses a basic (Ceasar)Substitution Cypher to encrypt a message.
Please enter the message to encode: the ships sail at midnight
Enter Key Value: 1
-------------------------------------------------------------
Encrypted string:  uif!tijqt!tbjm!bu!njeojhiu
Unencrypted string:  the ships sail at midnight
-------------------------------------------------------------
Daniel Dominguez
CIS110 Program 5
Fri Jun 21 15:31:41 2019
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk5$ python3 dominguez_program5.py
This program uses a basic (Ceasar)Substitution Cypher to encrypt a message.
Please enter the message to encode: testing z
Enter Key Value: 1
-------------------------------------------------------------
Encrypted string:  uftujoh!a
Unencrypted string:  testing z
-------------------------------------------------------------
Daniel Dominguez
CIS110 Program 5
Fri Jun 21 15:32:06 2019
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk5$
```

Code editor (right window) — dominguez_program5.py:

```python
'''
Program Name:dominguez_program5.py
Program Description:This encrypts a message using a substition cypher(caesar)
Author:Daniel Dominguez
Date Created:6/21/19
Notes of Interest: This one was fun!
'''
import time
def main():
        print("This program uses a basic (Ceasar)Substitution Cypher to encrypt a message.")
        message=input("Please enter the message to encode: ")
        key=int(input("Enter Key Value: "))
        message=message.lower()
        codedMessage=[]
        decodedMessage=[]
        lowCap=96
        maxCap=122

                                        #Encoding Starts Here

        for i in message:
                codedChar=ord(i)+key
                                        #Check to see if the new encoded char is out of
range
                if ord(i)+key>maxCap:
                                        #If the character ordinance is out of range,
subtract the max value from it and then add it to the minimum value
                        codedMessage.append(chr((codedChar-maxCap)+lowCap))
                else:
                                        #otherwise just store the value with the key
applied
                        codedMessage.append(chr(int(codedChar)))
                                        #Decoding Starts Here
        for n in codedMessage:
                                        #If the ordinance-key-lowcap is less than or
equal to 0 or the low cap (a)
                if (int(ord(n))-key)-lowCap<=0 and chr(int(ord(n))-key)!=lowCap:
                                        #treat this as a special case
                        decodedMessage.append(chr((((int(ord(n))-key)-lowCap)+maxCap)))
                else:
                                        #otherwise apply regular decryption algorithm
                        decodedMessage.append(chr(int(ord(n))-key))
                                        #join the list together and "update" variable
        decodedMessage="".join(decodedMessage)
        print("-------------------------------------------------------------")
        print("Encrypted string: ","".join(codedMessage))
                                        #Print the decoded message, and repalce : from
encryption with spaces
        print("Unencrypted string: ",decodedMessage.replace(":"," "))
        print("-------------------------------------------------------------")
        print("Daniel Dominguez")                    #prints authors name, class and date.
        print("CIS110 Program 5")                    #Prints the current date and time using asctime()
        print(time.asctime(time.localtime(time.time())))
main()
```