CS 5158 Project 2 AES Report – Brad Didier

My code was compiled and ran on Windows using Windows Powershell. I am on Python 3.10.

To run this program, simply launch the main.py file located in the aes_m13817841 folder. This can be done using the command "python main.py" while in the aes_m13817941 directory. No launch parameters are required, as the locations of the .txt files are mapped relatively in the program functions.

Key Generation Function:

```
Windows PowerShell × + 

PS C:\Users\bradd\Documents\Data Privacy And Security\Assignment 2\aes_m13817941> python main.py

Press 0 to Quit
Press 1 to Generate a Key
Press 2 to Encrypt
Press 3 to Decrypt

Enter your choice: 1
Key has been generated: 1c2153a1ea030aed3f696680be4559ec2be8dc15c31a30ca7c90a0d800f775ec

Press 0 to Quit
```

Encryption Function:

```
Press 0 to Quit
Press 1 to Generate a Key
Press 2 to Encrypt
Press 3 to Decrypt

Enter your choice: 2

Cipher text is 9523b291ea169aaf5d25ff47b448e40b79a7d296ef6d4fa989b296555d56c526df66c64e1ca3432d2e9d8ab9deaaf9c4
```

Decryption Function:

```
Press 0 to Quit
Press 1 to Generate a Key
Press 2 to Encrypt
Press 3 to Decrypt

Enter your choice: 3
Plaintext is: Welcome to data security and privacy 2023.
```