CS 5158 Project 1 OTP 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 otp_m13817941 folder. This can be done using the command "python main.py" while in the otp_m13817941 directory. No launch parameters are required, as the location of the .txt files are mapped relatively in the functions and parameters for specific functions like KeyGeneration() are asked for at runtime.

Encryption Function:

```
Windows PowerShell X + V

PS C:\Users\bradd\Documents\Data Privacy And Security\Assignment 1\otp_m13817941> python main.py

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

Enter your choice: 1
Ciphertext: 001101111100111111001000101111101
```

Decryption Function:

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

Enter your choice: 2
Plain text is: bear
```

KeyGeneration Function:

```
Press 0 to Quit
Press 1 to Encrypt
Press 2 to Decrypt
Press 3 to Generate a Key
Enter your choice: 3
Enter key length: 20
00000011001001100011
Press 0 to Quit
Press 1 to Encrypt
Press 2 to Decrypt
Press 3 to Generate a Key
Enter your choice: 3
Enter key length: 100
Press 0 to Quit
Press 1 to Encrypt
Press 2 to Decrypt
Press 3 to Generate a Key
Enter your choice: 3
Enter key length: 200
Invalid key length given
```