The application I have chosen is an encryption and decryption application. The purpose of this application is to encrypt an Excel files data by scrambling the letters in each sheet of the Excel file. This is useful because if you wanted to send a file to someone containing data that you do not want to be leaked then you can scramble the contents in the file using this application and if a different person happened to get their hands on the encrypted file it would be difficult for them to unscramble the file and get the information. Of course, the person you are sending the file to must have a way to unscramble the file, otherwise it would be useless to them. That is why there is a decryption function that can help the person on the other end to unscramble the contents of the file and be able to read its contents. The application also keeps track of the number of characters that it has encrypted and stores it in a database. It then pulls all the data from the updated database and creates a chart to show how many characters it has encrypted for each date. Finally, it outputs the chart, along with the results from the database, into a word document called “Output.docx”.

The reason I chose this application is because cyber-security has always been one of my major interests, and encryption and decryption is a big part of it. Although the technique used to encrypt data in this application can be easily cracked by modern day hackers, I still wanted to try making my own encryption application to get a better understanding of how to encrypt and decrypt messages.