**Project Execution Steps and Reports**

The application runs using a text file. We need to specify the input file location in the program.

The algorithm developed is based on DES encryption. It takes the input from a text file which contains the Message and Cipher text. The algorithm uses a brute force approach to try all the possible combination keys.

Below is the graph for searching the keys in the key space of 2 power 56.

The algorithm took 281.4 seconds for the first test case that is 2^19

The algorithm took 606.35 seconds for the second test case that is 2^20

The algorithm took 1180 seconds for the third test case that is 2^21

The Y-axis represents time in seconds.

The X-axis represents key size 219,220,221 respectively.