Sri SAI RAM INSTITUTE OF TECHNOLOGY

An ISO 9001 : 2008 Certified Institution

Sai Leo Nagar, West Tambaram, Chennai - 600 044

INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE (IEDC)

(Funded by Department of Science & Technology, Government of India, New Delhi)

IEDC project No. 03 – for the year 2015 -2016

CHARACTER ENCRYPTION FOR DATA SECURITY

S.Ragavi

A.Subathra

PROJECT GUIDE:

Ms Ilakkiya.J, M.Tech , Assistant Professor/Information Technology

SRI SAIRAM INSTITUTE OF TECHNOLOGY

Funded by

NATIONAL SCIENCE & TECHNOLOGY ENTREPRENEURSHIP DEVELOPMENT BOARD (NSTEDB),

DEPARTMENT OF SCIENCE AND TECHNOLOGY,

GOVERNMENT OF INDIA, NEW DELHI.

DEPARTMENT OF SCIENCE AND TECHNOLOGY

INTRODUCTION:

"Everybody has their security blankets in this world. Some are just sharper than others." One such sharp way of providing security to data is our proposing algorithm "PHONEME ENCRYPTOR". Encryption is a way to enhance the security of a message or file by scrambling the contents so that it can be read only by someone who has the right encryption key to unscramble it.In recent years, encryption technology has been developed quickly and many encryption methods have been put forward. Shifting technologies and changing environment are required to refocus on security techniques for the protection of sensitive data. Our algorithm proposes a clear mathematical-free encryption technique for alphabets in text document.

INNOVATIVE IDEAS:

We propose a character based encryption for data security with the following features:

- No tool required for implementing this encryption algorithm.
- No specific key is required for encrypting; the user itself acts as a key.
- No complex mathematical calculations required or applied**.**

WORKING:

- On installing the software package the user is provided with encryption and decryption algorithm.
- The user needs to enter the source file name and destination file name.
- After assigning the alphabets, the file which is given as input is converted into cipher text in the destination file.
- The cipher text will not be in a human readable format.
- The decryption process is same as that of encryption processexcept that the output is a plain text.

ADVANTAGES OF PROPOSED ALGORITHM:

- Ranging from stand alone computers to personal digital assistants.
- Revolutionary idea for cloud storage which has been an adept.
- Text file that acts as treasure can be encrypted through this technique.
- Purely based on the human mentality and capability.

FUTURE EXTENSIONS:

- To develop software for the fragmentation of data among various cloud servers.
- To generate an OTP(One Time Password) for users.

SYSTEM ARCHITECTURE:

SOCIAL RELEVANCE AND DEVELOPMENT

- Ranging from stand alone computers to personal digital assistants the algorithm provides utmost safety.

- Revolutionary idea for cloud storage which has been an adept.
- Text files that acts as treasure can be encrypted through this technique

MARKET SURVEY AND NEED

- Our encryptor is completely mathematical-free and avoids tedious calculations. Moreover since the key is under the user control, it is free from hacking."
- Therefore we conclude saying that, our encryptor can very well survive in market overcoming the obstacles in other algorithms.
- **SYSTEM REQUIREMENTS:**

1.HARDWARE REQURIEMENTS:

- Stand alone computer
- 256 MB RAM

2.SOFTWARE REQUIREMENTS:

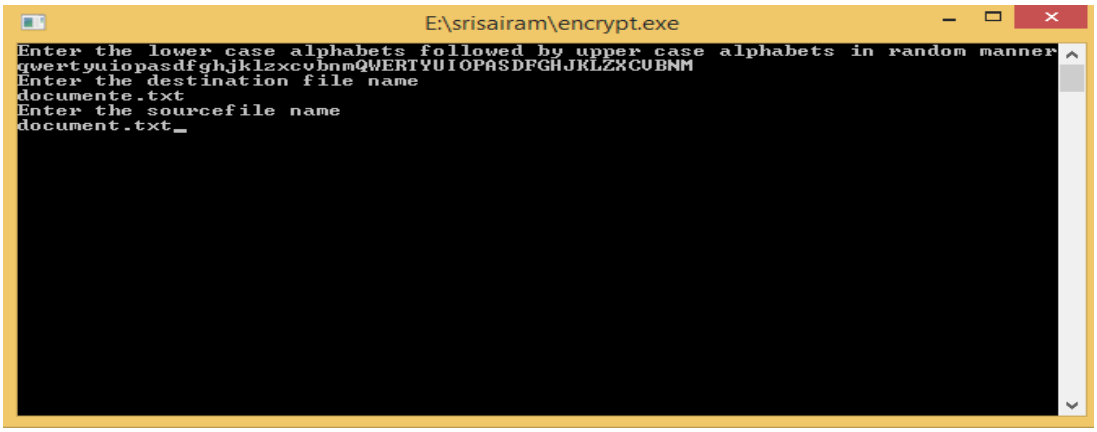
- JAVA

3.OPERATING SYSTEM:

- WINDOWS (versions 7&till date)

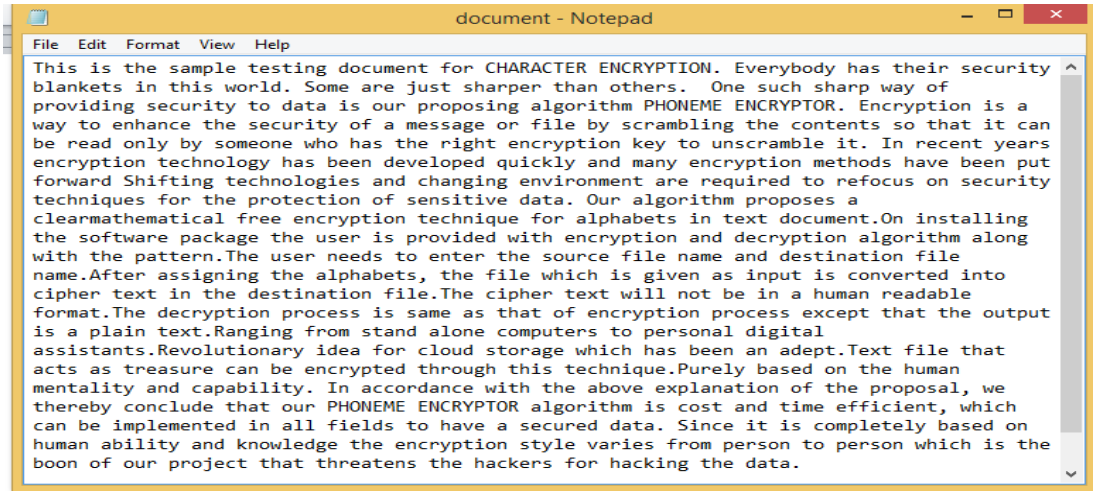
PROJECT DETAILS

1. Run the encryption module.

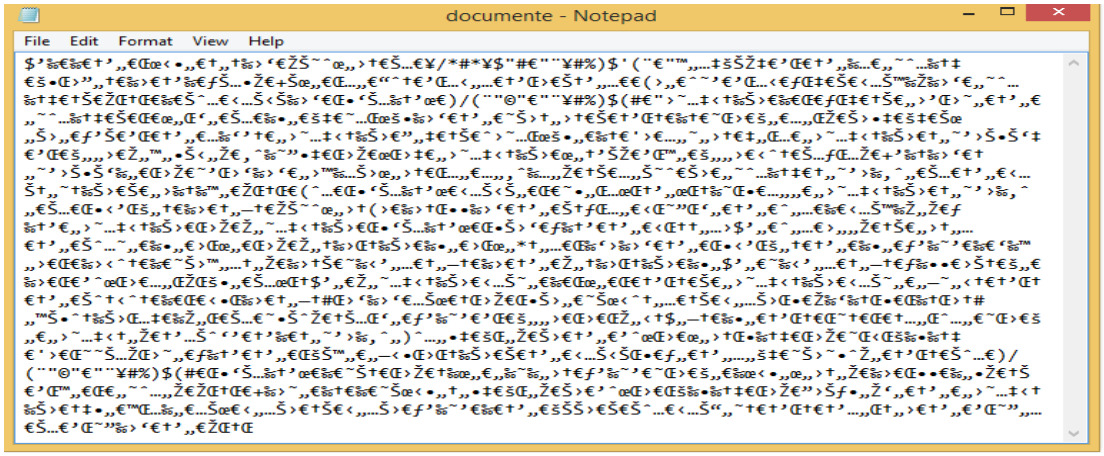


2. The document to be encrypted is given as source file and the destination file is given.

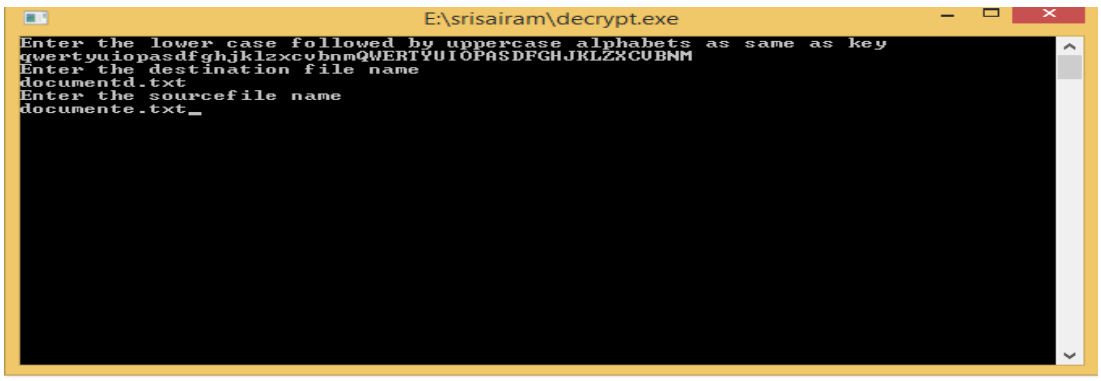
The document given for the encryption is shown below:



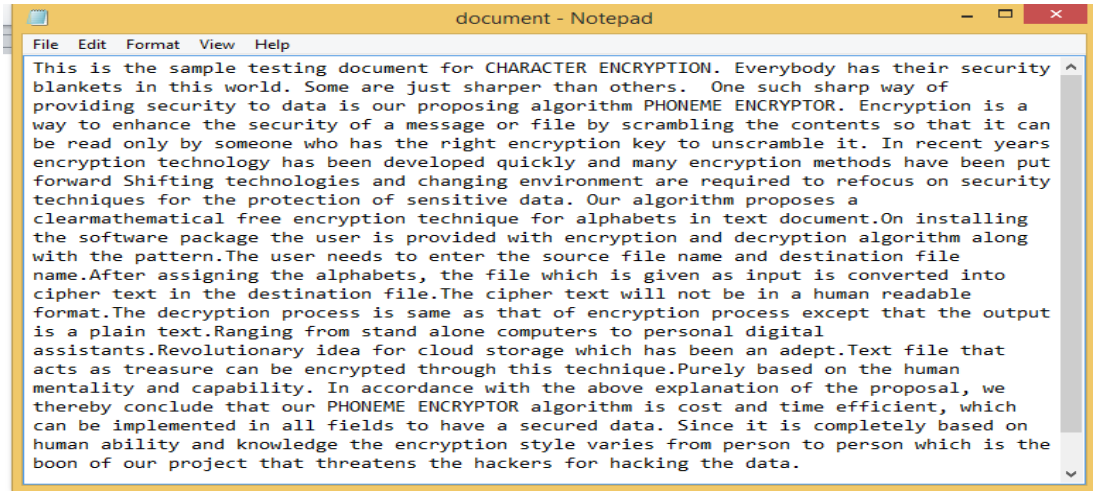
The encrypted document is given below:



3. Run the decryption module to decrpty the file. The encrypted file is given as source file and the decrypted file is given as destination file.



The decrypted file is shown below:



CONCLUSION:

In accordance with the above explanation of the proposal, we thereby conclude that our PHONEMEENCRYPTOR algorithm is cost and time efficient, which can be implemented in all fields to have a secured data. Since it is completely basedon human ability and knowledge the encryption style varies from person to person which is the boon of our project that threatens the hackers for hacking the data.