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A Secure Simple Process Of Key Generation In Cryptography Algorithm

I. Infant Raj*, B. Kiran Bala

Department of Computer Science and Engineering,
K. Ramakrishnan College of Engineering, Trichy, Tamil Nadu, India.

Abstract : Security is a major part of technology in the world to give more security for the networks the system have different part of key generation methods for both sender as well as receiver side of the network key manipulation is an important part of the system. For each letter addition of 5 in there ASCII value, Each word addition of 7 in there ASCII value, Each line addition of 9 in there ASCII value finally for each paragraph addition of 11 will be cipher text then in receiver side decrypt the cipher by subtracting 11 with initial step in receiver side and followed with those steps subtracting 9,7 and 5 consecutively finally plain text archived.

Keywords : Plain Text, Cipher Text, Cryptography, Encryption, Decryption.

1. Introduction

To give security for the present technology is very highly competitive work in the present scenario and to overcome all those kind of thinks and provide security by using cryptography algorithm is a challenging work. The system deals with those kind of things and possible applicable to present high profile market[3][2].

2. Proposed System

The system analyze the initial plain text and it will convert the plain text into cipher text by using key the major part of the work done only through key generation because to generate a key is not only matter of encryption side it will be for both sides so the major work only focus on key generation for both sides. Few parameters are required for the algorithm process[1][2].

Step1: Message should be combination of a-z, A-Z, 0-9, and special characters must in the message for each transfer.

Step2: In sender side key generation process each letter should add 5, each word add 7, each line add 9 and each paragraph add 11.

Step3: In Receiver side key generation process each letter should sub 5, each word should 7, each line sub 9 and each paragraph sub 11.

Step 4: All the above process for each transaction for every process repeat from step 1 to step 3.

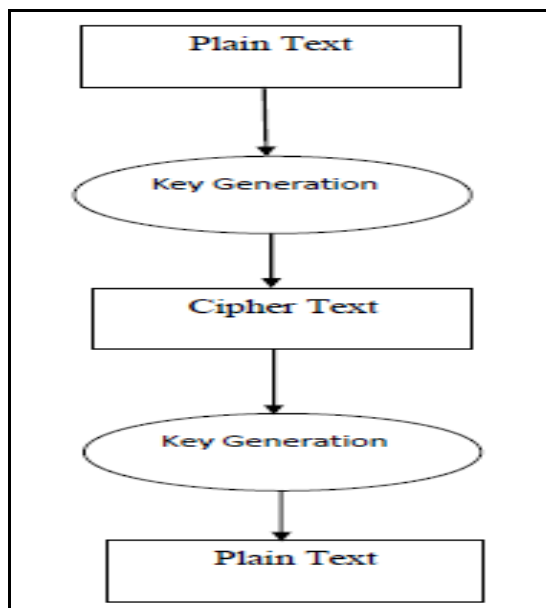


Figure 1: Block Diagram

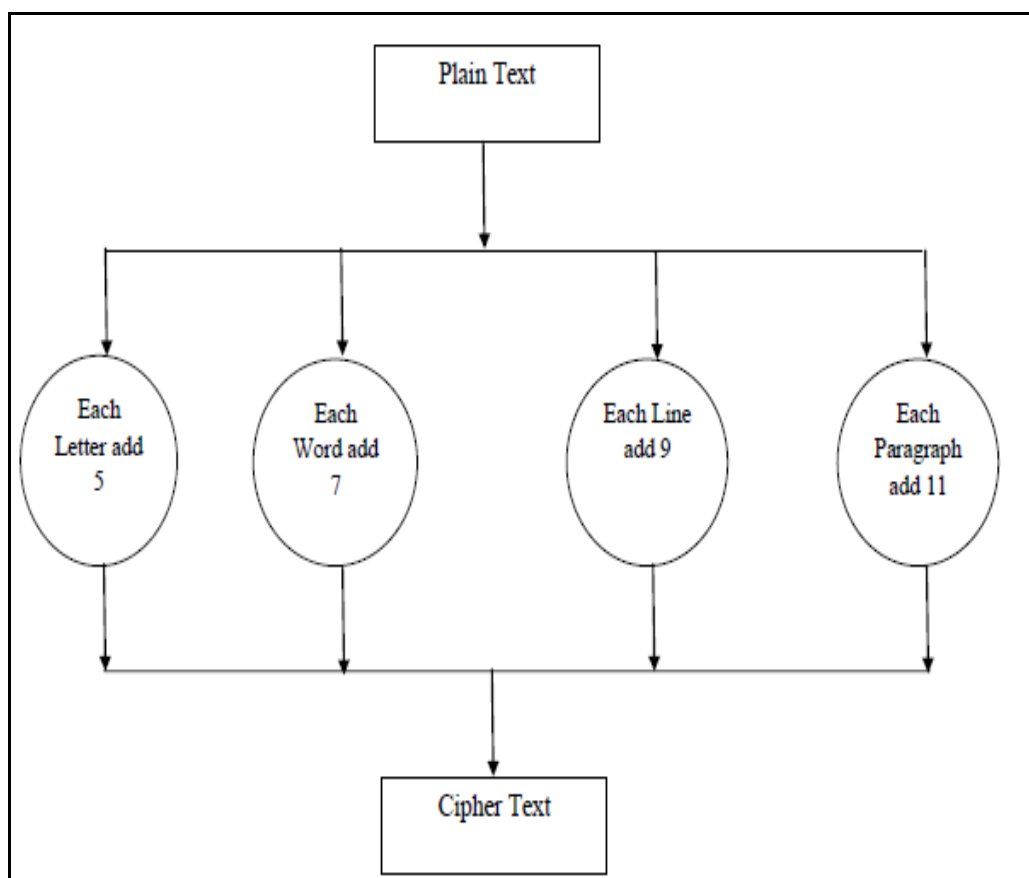


Figure 2: Key Generation in Sender Side

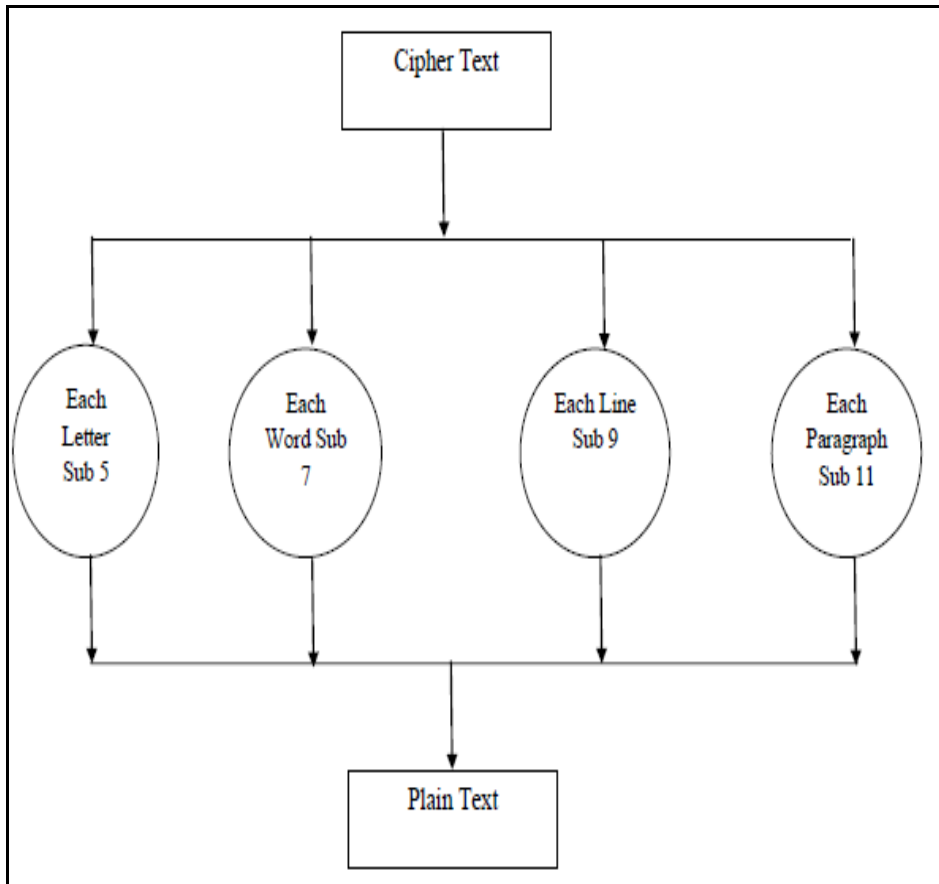


Figure 3: Key Generation in Receiver side

3.Implementation

The Implementation part has been made and shown in the figure 4 and figure 5. The figure 4 shows initial plain text and conversion to cipher text and figure 5 shows cipher text to plain text[3][4].

The output shows in plain text no. of letters 16, no. of words 4 no. of lines 1, no. of paragraph 1. First step of the program execute the each letter addition of 5 we got the result of letter process is ymnx nx f xfruk yjcx, then, addition of 7 to word the system gives result as word process ftueuc m emybxr fgje, addition of 9 in line process system gives ocdndl v nvhkg a ozsn, finally addition of 11 to line process give cipher text as znoyow g ygyvrl zkdy.

The figure 5 shows the process of decryption part of the system. Initially cipher text is znoyow g ygyvrl zkdy line process subtraction of 9 system gives ocdndl v nvhkg a ozsn, In word process also subtraction of 7 system gives ftueuc m emybxr fgje, Letter process subtraction of 5 and finally we got the original plain text as This is a sample Text.

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Enter the No. of Letters : 17
Enter the No. of Words: 4
Enter the No. of Lines: 1
Enter the No. of Paragraphs: 1
This is a sample Text

Encrypting.....

Letter Process: ymnx nx f xfruqk yjcx
Word Process: ftueuc m emybxr fqje
Line Process: ocdndl v nvhkg a ozsn
Cipher Text znoyow g ygyvrl zkdy

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Figure 4: Output for Sender Side

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Cipher Text znoyow g ygyvrl zkdy

Decrypting.....

Line Process: ocdndl v nvhkg a ozsn
Word Process: ftueuc m emybxr fqje
Letter Process: ymnx nx f xfruqk yjcx
Plain Text: This is a sample Text
Enter the No. of Letters : 17
Enter the No. of Words: 4
Enter the No. of Lines: 1
Enter the No. of Paragraphs: 1

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Figure 5: Output for Receiver Side

4. Conclusion

To give high security in cryptography the proposed system executes the program of key generation algorithm in both side of the cryptography and to strengthen the existing algorithm and key generation this proposed algorithm plays a vital role in the implementation part shows the execution of both encryption and decryption part of the network. for the implementation part the system gives very high security with simple process even the execution time of the conversion is also very low in both side of encryption part as well as decryption part of the system.

5. Future Enhancement

In Future not only in text, In Audio, Video, animated images, Voice, MMS the key generation is of proposed algorithm will deal all kind of activities which lead to the next generation of the world in technology.

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