60 HOURS CODE SPRINT

Cryptography-Play Cipher

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BlogSpot: http://ourplaycipher.blogspot.com/

Cryptography-Play cipher

Terminologies

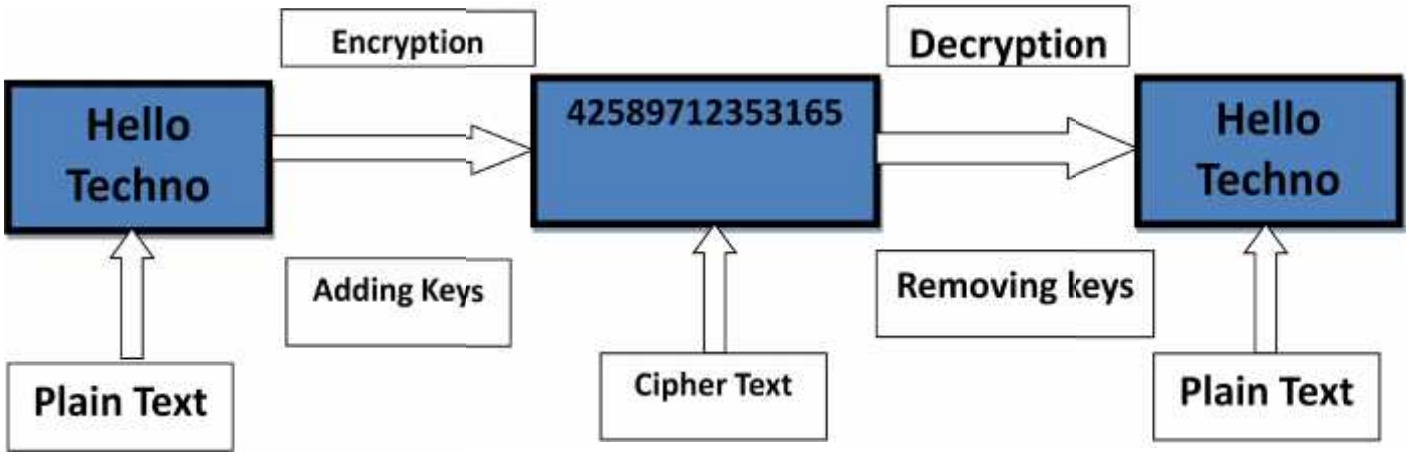
Cryptography is the science of using mathematics to encrypt and decrypt data.

Data that can be read and understood without any special measures is called ***Plaintext*** or ***clear text***.

The method of disguising plaintext in such a way as to hide its substance is called ***encryption***.

Encrypting plaintext results in unreadable gibberish called ***cipher text***.

The process of reverting cipher text to its original plaintext is called ***decryption***.



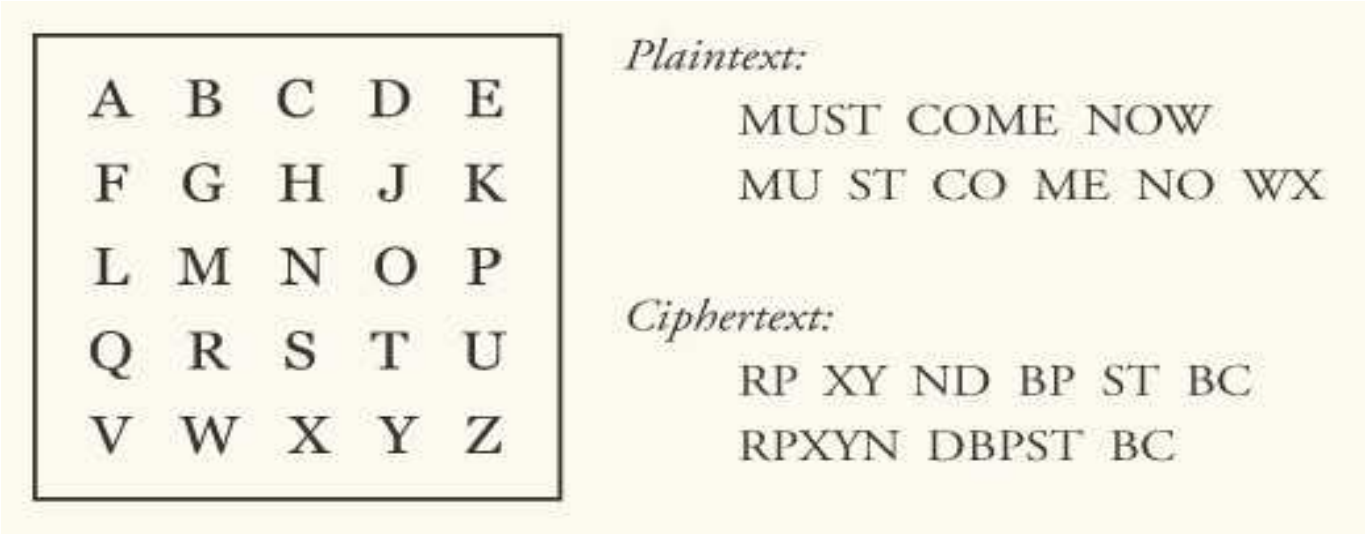
Play Cipher

Description:

The technique encrypts pairs of letters (*diagrams*), instead of single letters.

The Play fair cipher uses a 5 by 5 table containing a key word or phrase.

One alphabet is substituted with one other alphabet.



Our algorithm

Description

In this algorithm we use 3*3 numeric matrix instead of 5*5 Alphabet matrix.

Steps:

Step1: Taking file from user.

Step2: Get each char and convert into ASCII values.

Step3: Generate random number between 1 and 9 and multiply to each ASCII values.

Step4: Generate random number between 900 and 1000 and add to each ASCII values.

Step5: Generate random Armstrong number and add to each ASCII values.

Step6: Separate each four digit number in two parts

I) Last two part stored into database.

II) First two part is used for play cipher matrix to encrypt data.

Step7: Applying Play cipher rules to each pair of numbers.

Step 8: After encrypting each values, store in database as string.

Advantage:

We are using 3*3 matrix instead of 5*5 matrix, required low space.