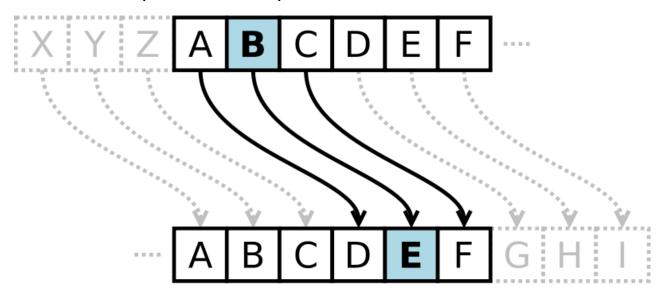
## Type Script for selected topics 2 project

Created by Abdul-Rahman Ahmad Muhammad

A **Caesar cipher** is a simple method of encoding messages. Caesar ciphers use a substitution method where letters in the alphabet are shifted by some fixed number of spaces to yield an encoding alphabet. A Caesar cipher with a shift of 11 would encode an A as a B, an M as an N, and a Z as an A, and so on. The method is named after Roman leader Julius Caesar, who used it in his private correspondence.



Running of Code:

```
PS C:\Users\ALPHA\Desktop\S_T> python -u "c:\Users\ALPHA\Desktop\S_T\Caeser Cipher.py"

A python program to illustrate Caesar Cipher Technique
Enter Plaintext : helloworld
Enter Shift Key : 4

Text : helloworld
Shift : 4

Cipher: lippsasvph
Repeat? [y|n]: n

#Thanks for your time#

#Created by Abdul-Rahman Alpha#
PS C:\Users\ALPHA\Desktop\S_T>
```

**Vigenère cipher**, type of substitution cipher used for data encryption in which the original plaintext structure is somewhat concealed in the ciphertext by using several different monoalphabetic substitution ciphers rather than just one; the code key specifies which particular substitution is to be employed for encrypting each plaintext symbol. Such resulting ciphers, known generically as polyalphabetics, have a long history of usage. The systems differ mainly in the way in which the key is used to choose among the collection of monoalphabetic substitution rules. The cipher was invented in 1553 by the Italian cryptographer Giovan Battista Bellaso but for centuries was attributed to the 16th-century French cryptographer Blaise de Vigenère, who devised a similar cipher in 1586.

```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
ABCDEFGHIJKLMNOPQRSTUVWXYZ
BCDEFGHIJKLMNOPQRSTUVWXYZA
CDEFGHIJKLMNOPQRSTUVWXYZAB
DEFGHIJKLMNOPQRSTUVWXYZABC
                                                 VVVRBACP
                                         cipher
E F G H I J K L M N O P Q R S T U V W X Y Z A B C D
F G H I J K L M N O P Q R S T U V W X Y Z A B C D E
                                         key
                                                 COVERCOVER ...
GHIJKLMNOPQRSTUVWXYZABCDEF
                                                 THANKYOU
                                         plaintext
HIJKLMNOPQRSTUVWXYZABCDEFG
IJKLMNOPQRSTUVWXYZABCDEFGH
                                         In encrypting plaintext, the cipher
J K L M N O P Q R S T U V W X Y Z A B C D E F G H I
                                         letter is found at the intersection
KLMNOPQRSTUVWXYZABCDEFGHIJ
                                         of the column headed by the
LMNOPQRSTUVWXYZABCDEFGHIJK
                                         plaintext letter and the row indexed
MNOPQRSTUVWXYZABCDEFGHIJKL
                                         by the key letter. To decrypt
NOPQRSTUVWXYZABCDEFGHIJKLM
OPQRSTUVWXYZABCDEFGHIJKLMN
PQRSTUVWXYZABCDEFGHIJKLMNO
                                         ciphertext, the plaintext letter is
                                         found at the head of the column
                                         determined by the intersection of
QRSTUVWXYZABCDEFGHIJKLMNOP
                                         the diagonal containing the cipher
RSTUVWXYZABCDEFGHIJKLMNOPQ
STUVWXYZABCDEFGHIJKLMNOPQR
                                         letter and the row containing the
TUVWXYZABCDEFGHIJKLMNOPQRS
                                         key letter.
UVWXYZABCDEFGHIJKLMNOPQRST
VWXYZABCDEFGHIJKLMNOPQRSTU
WXYZABCDEFGHIJKLMNOPQRSTUV
XYZABCDEFGHIJKLMNOPQRSTUVW
YZABCDEFGHIJKLMNOPQRSTUVWX
ZABCDEFGHIJKLMNOPQRSTUVWXY
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```

## Running of Code:

```
PS C:\Users\ALPHA\Desktop\S_T> python -u "c:\Users\ALPHA\Desktop\S_T\vigenere Cipher.py"
#A python program to illustrate vigenere Cipher Technique
Enter some Plain text : helloworld
Enter a key : welcome
Plain text: helloworld
Key : welcome
Cipher Text : diwncisnpo
Repeat? [y | n]: n
#Thanks for your time#
#Created by Abdul-Rahman Alpha#
PS C:\Users\ALPHA\Desktop\S_T>
```

## **Thanks**