# Programming In The Past

John Eletto

October 5, 2018

## **FORTRAN**

Hours Spent:  $\sim 3$ 

## FORTRAN Diary

Today I'm starting FORTRAN. It wasn't to hard to install the compiler. I'm using gfortran on my mac.

I'm starting to write FORTRAN now. Who the hell came up with this? I'd be better off programming on punch cards.

This isn't too bad. Once you figure out how to set variables and make subroutines, it's a breeze. Somewhat similar to Visual Basic. Now I have to figure out how to do Caesar Cipher.

I learned how to do Caesar Cipher from the internet. You have to use modulo. Now let's do it in FORTRAN. (asciiValue - 65 + shiftAmount) mod 65

Decrypt is just the same thing except minus the shiftAmount. Done.

#### FORTRAN Code

```
! file: CaesarCipher.f90
! author: John Eletto
! website: johneletto.com
! github: git.johneletto.com
program CaesarCipher
    ! set key for cipher
    INTEGER :: shiftAmount = 26
    ! set string to encrypt
   CHARACTER(len = 38) :: word = "THIS IS A TEST STRING FROM JOHN ELETTO"
    ! call encrypt
    call encrypt(word, shiftAmount)
    ! call decrypt
    call decrypt(word, shiftAmount)
end program CaesarCipher
! Encrypt SubRoutine
subroutine encrypt(word, shiftAmount)
```

```
! declaring needed variables
   CHARACTER(*) :: word
   INTEGER :: shiftAmount
   INTEGER :: i
   ! loop for every character of our string
   do i = 1, len(word)
        select case(word(i:i))
            ! if the character is A-Z
            case ("A" : "Z")
                ! perform caesar cipher on the current character
                ! achar returns the character value from ASCII Number sequence
                ! iachar retrns the ASCII number from a character
                word(i:i) = achar(modulo(iachar(word(i:i)) - 65 + shiftAmount, 2)
            ! if the character is a space, preserve the space
            case (" ")
                word(i:i) = ""
        end select
   end do
    print *, "Encrypted: ", word
end subroutine encrypt
! Decrypt SubRoutine
subroutine decrypt (word, shiftAmount)
    ! Declare needed variables
   CHARACTER(*) :: word
   INTEGER :: shiftAmount
   INTEGER :: i
   INTEGER :: j
    ! loop from 1 to shiftAmount (this gives all possible combinations)
    do j = 1, shiftAmount
        ! loop for every character of our string
        do i = 1, len(word)
            ! select current character
            select case (word(i:i))
                ! if character is A-Z
                case ("A" : "Z")
                    word(i:i) = achar(modulo(iachar(word(i:i)) - 65 - shiftAmoun
                ! Preserve spaces
                case (" ")
                    word(i:i) = ""
            end select
        end do
        ! Print current and then decrement shiftAmount and do it again.
```

```
\begin{array}{lll} print & *, & "Caesar & ", & shiftAmount \\ & shiftAmount & = & shiftAmount & -1 \\ end & do & \end{array}
```

end subroutine decrypt

## FORTRAN Output

```
Encrypted: THIS IS A TEST STRING FROM JOHN ELETTO
 Caesar
                  26 : THIS IS A TEST STRING FROM JOHN ELETTO
 Caesar
                  25: UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP
 Caesar
                  24 : WKLV LV D WHWW VWULQJ IURP MRKQ HOHWWR
                  23 : ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU
 Caesar
                  22 : DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY
 Caesar
 Caesar
                  21 : IWXH XH P ITHI HIGXCV UGDB YDWC TATIID
 Caesar
                  20 : OCDN DN V OZNO NOMDIB AMJH EJCI ZGZOOJ
                  19 : VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ
 Caesar
                  18 : DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY
 Caesar
                  17 : MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH
 Caesar
                  16 : WKLV LV D WHWW VWULQJ IURP MRKQ HOHWWR
 Caesar
 Caesar
                  15 : HVWG WG O HSGH GHFWBU TFCA XCVB SZSHHC
 Caesar
                  14 : THIS IS A TEST STRING FROM JOHN ELETTO
 Caesar
                  13 : GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB
                  12 : UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP
 Caesar
                  11 : JXYI YI Q JUIJ IJHYDW VHEC ZEXD UBUJJE
 Caesar
                  10 : ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU
 Caesar
 Caesar
                   9 : QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL
                   8 : IWXH XH P ITHI HIGXCV UGDB YDWC TATIID
 Caesar
                   7 : BPQA QA I BMAB ABZQVO NZWU RWPV MIMBBW
 Caesar
                   6 : VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ
 Caesar
                   5 : QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL
 Caesar
 Caesar
                   4 : MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH
 Caesar
                   3 : JXYI YI Q JUIJ IJHYDW VHEC ZEXD UBUJJE
                   2 : HVWG WG O HSGH CHFWBU TFCA XCVB SZSHHC
 Caesar
 Caesar
                   1 : GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB
```

Encrypted: XLMW MW E XIWX WXVMRK JVSQ NSLR IPIXXS

Caesar 4 : THIS IS A TEST STRING FROM JOHN ELETTO
Caesar 3 : QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL
Caesar 2 : OCDN DN V OZNO NOMDIB AMJH EJCI ZGZOOJ
Caesar 1 : NBCM CM U NYMN MNLCHA ZLIG DIBH YFYNNI

#### COBOL

Hours Spent:  $\infty$ 

## **COBOL** Diary

COBOL looks like an absolute shit show. Saving this for last like a true procrastinator.

COBOL is impossible. I don't know why anyone would try to make a programming language for business people. This is what you get. I have absolutely no clue what's going on in COBOL and I'm not really interested in figuring it out. Skipping COBOL.

#### COBOL Code

# **Cobol Programmer**



## **BASIC**

Hours Spent:  $\sim 2$ 

## **BASIC Diary**

Basic isn't very hard. I have some experience with Visual Basic and this isn't very different.

#### **BASIC** Code

' file: CaesarCipher.bas
' author: John Eletto
' website: johneletto.com
' github: git.johneletto.com

' Subroutine for encrypting with the Caesar Cipher Sub encrypt (word As String , shiftAmount as Integer)

Dim currentCharAscii As Integer For i As Integer = 0 To Len(word)

```
currentCharAscii = word[i]
        Select Case As Const word[i]
            'If character is 'A' to 'Z'
            Case 65 To 90
                word[i] = currentCharAscii + shiftAmount
                 If word[i] > 90 Then word[i] = 26
            ' If character is a space
            Case 32
                word[i] = word[i]
        End Select
    Next
    Print "Encrypted: "; word
End Sub
' Subroutine for decrypting with the Caesar Cipher
Sub decrypt (word As String, shiftAmount as Integer)
    Dim CurrentCharAscii As Integer
    'For i As Integer = 0 to shiftAmount
        For j As Integer = 0 to Len(word)
            currentCharAscii = word[j]
            Select Case As Const word[j]
                Case 65 To 90
                     word [j] = currentCharAscii - shiftAmount
                     If word[j] < 65 Then word[j] += 26
                Case 32
                    word[j] = word[j]
            End Select
        Next
        Print "Decrypted: "; ": "; word
        'If shiftAmount = 1 Then return
        'decrypt word, shiftAmount - 1
    'Next
End Sub
' Subroutine for solving with the Caesar Cipher
Sub solve (word As String, shiftAmount as Integer)
    Dim CurrentCharAscii As Integer
        For j As Integer = 0 to Len(word)
            currentCharAscii = word[j]
            Select Case As Const word [j]
                Case 65 To 90
                    word [j] = current Char Ascii - shift Amount
                     If word[j] < 65 Then word[j] += 26
                Case 32
                    word[j] = word[j]
```

```
End Select
Next
Print "Caesar "; shiftAmount; ": "; word
If shiftAmount <= 1 Then return
solve word, shiftAmount - 1
End Sub

Dim As Integer shiftAmount = 25
Dim As String word = "THIS IS A TEST STRING FROM JOHN ELETTO"
encrypt word, shiftAmount
decrypt word, shiftAmount
Print "Solving:"
solve word, 26
```

#### **BASIC Output**

Encrypted: SGHR HR Z SDRS RSQHMF EQNL INGM DKDSSN Decrypted: : THIS IS A TEST STRING FROM JOHN ELETTO Solving: Caesar 26: THIS IS A TEST STRING FROM JOHN ELETTO Caesar 25: UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP 24: WKLV LV D WHWW VWULQJ IURP MRKQ HOHWWR Caesar 23: ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU Caesar 22: DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY Caesar 21: IWXH XH P ITHI HIGXCV UGDB YDWC TATIID Caesar Caesar 20: OCDN DN V OZNO NOMDIB AMJH EJCI ZGZOOJ Caesar 19: VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ 18: DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY Caesar Caesar 17: MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH Caesar 16: WKLV LV D WHWW VWULQJ IURP MRKQ HOHWWR Caesar 15: HVWG WG O HSGH GHFWBU TFCA XCVB SZSHHC Caesar 14: THIS IS A TEST STRING FROM JOHN ELETTO Caesar 13: GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB Caesar 12: UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP 11: JXYI YI Q JUIJ IJHYDW VHEC ZEXD UBUJJE Caesar Caesar 10: ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI HIGXCV UGDB YDWC TATIID 7: BPQA QA I BMAB ABZQVO NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ Caesar

Caesar 5: QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL Caesar 4: MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ LJHYDW VHEC ZEXD UBUJJE Caesar 2: HVWG WG O HSGH GHFWBU TFCA XCVB SZSHHC Caesar 1: GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB

Encrypted: WKLV LV D WHVW VWULQJ IURP MRKQ HOHWWR Decrypted: : THIS IS A TEST STRING FROM JOHN ELETTO Solving: 26: THIS IS A TEST STRING FROM JOHN ELETTO Caesar 25: UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP Caesar 24: WKLV LV D WHVW VWULQJ IURP MRKQ HOHWWR Caesar Caesar 23: ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU Caesar 22: DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY 21: IWXH XH P ITHI HIGXCV UGDB YDWC TATIID Caesar Caesar 20: OCDN DN V OZNO NOMDIB AMJH EJCI ZGZOOJ 19: VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ Caesar Caesar 18: DRSC SC K DOCD CDBSXQ PBYW TYRX OVODDY 17: MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH Caesar Caesar 16: WKLV LV D WHWW VWULQJ IURP MRKQ HOHWWR Caesar 15: HVWG WG O HSGH GHFWBU TFCA XCVB SZSHHC Caesar 14: THIS IS A TEST STRING FROM JOHN ELETTO Caesar 13: GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB Caesar 12: UIJT JT B UFTU TUSJOH GSPN KPIO FMFUUP Caesar 11: JXYI YI Q JUIJ IJHYDW VHEC ZEXD UBUJJE Caesar 10: ZNOY OY G ZKYZ YZXOTM LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI HIGXCV UGDB YDWC TATIID 7: BPQA QA I BMAB ABZQVO NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV UVTKPI HTQO LQJP GNGVVQ Caesar Caesar 5: QEFP FP X QBPQ PQOFKD COLJ GLEK BIBQQL 4: MABL BL T MXLM LMKBGZ YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ IJHYDW VHEC ZEXD UBUJJE Caesar 2: HVWG WG O HSGH GHFWBU TFCA XCVB SZSHHC Caesar Caesar 1: GUVF VF N GRFG FGEVAT SEBZ WBUA RYRGGB

## Pascal

Hours Spent:  $\sim 2$ 

#### **Pascal Diary**

Pascal isn't too bad. The syntax is a little weird, and the comments are really weird. However, at least it makes logical sense (unlike COBOL).

#### Pascal Code

```
{
    file: CaesarCipher.pas
    author: John Eletto
    website: johneletto.com
    github: git.johneletto.com
}
Program CaesarCipher(output);
{ Proceudre to encrypt a word given a word and shiftAmount }
procedure encrypt(var word: string; shiftAmount: integer);
       i: integer;
    begin
       for i := 1 to length(word) do
            case word[i] of
               'A'...'Z': word[i] := chr(ord('A') + (ord(word[i]) - ord('A') + s
               ' ': word[i] := ', ';
           end;
        writeln ('Encrypted: ', word);
   end;
{ Proceudre to decrypt a word given a word and shiftAmount }
procedure decrypt(var word: string; shiftAmount: integer);
    var
       i: integer;
    begin
       for i := 1 to length(word) do
           case word[i] of
                ' ': word[i] := ' ';
           end;
        writeln('Decrypted: ', word);
   end;
{ Proceudre to solve a caesar cipher by returning all solutions }
procedure solve (var word: string; shiftAmount: integer);
    var
       i: integer;
    begin
       for i := 1 to length(word) do
            case word[i] of
               'A'..'Z': word[i] := chr(ord('A') + (ord(word[i]) - ord('A') - s
               ' ': word [i] := ' ';
```

```
writeln('Caesar', shiftAmount, ': ', word);
        if(shiftAmount = 1)
        else solve (word, shiftAmount -1);
    end;
var
    word: string;
    shiftAmount: integer;
begin
    shiftAmount := 15;
    word := 'THIS IS A TEST MESSAGE FROM JOHN ELETTO';
    encrypt(word, shiftAmount);
    decrypt(word, shiftAmount);
    writeln('Solving:');
    solve (word, 26);
end.
Pascal Output
Shift: 15
Encrypted: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID
Decrypted: THIS IS A TEST MESSAGE FROM JOHN ELETTO
Solving:
Caesar 26: THIS IS A TEST MESSAGE FROM JOHN ELETTO
Caesar 25: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP
Caesar 24: WKLV LV D WHVW PHVVDJH IURP MRKQ HOHWWR
Caesar 23: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU
Caesar 22: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY
Caesar 21: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID
Caesar 20: OCDN DN V OZNO HZNNVBZ AMJH EJCI ZGZOOJ
Caesar 19: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ
Caesar 18: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY
Caesar 17: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH
Caesar 16: WKLV LV D WHVW PHVVDJH IURP MRKQ HOHWWR
Caesar 15: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC
Caesar 14: THIS IS A TEST MESSAGE FROM JOHN ELETTO
Caesar 13: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB
Caesar 12: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP
```

Caesar 11: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 10: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 7: BPQA QA I BMAB UMAAIOM NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 5: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 4: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 2: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC Caesar 1: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB

#### Shift: 7

Encrypted: AOPZ PZ H ALZA TLZZHNL MYVT QVOU LSLAAV Decrypted: THIS IS A TEST MESSAGE FROM JOHN ELETTO Solving: Caesar 26: THIS IS A TEST MESSAGE FROM JOHN ELETTO Caesar 25: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP Caesar 24: WKLV LV D WHVW PHVVDJH IURP MRKQ HOHWWR Caesar 23: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 22: DRSC SC K DOCD WOCKQO PBYW TYRX OVODDY Caesar 21: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 20: OCDN DN V OZNO HZNNVBZ AMJH EJCI ZGZOOJ Caesar 19: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 18: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY Caesar 17: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH Caesar 16: WKLV LV D WHWW PHVVDJH IURP MRKQ HOHWWR Caesar 15: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC Caesar 14: THIS IS A TEST MESSAGE FROM JOHN ELETTO Caesar 13: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB Caesar 12: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP Caesar 11: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 10: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 7: BPQA QA I BMAB UMAAIOM NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 5: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 4: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 2: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC

Caesar 1: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB

## Scala

Hours Spent:  $\sim 2$ 

## Scala Diary

Scala is cool. It feels like I'm back in 2018. Thanks Scala.

## Scala Code

```
// file: CaesarCipher.pas
// author: John Eletto
// website: johneletto.com
// github: git.johneletto.com
object CaesarCipher {
    var word = "THIS IS A TEST MESSAGE FROM JOHN ELETTO";
    var shiftAmount = 15;
    val alpha = 'A' to 'Z'
    def main(args: Array[String]) {
        encrypt();
        decrypt();
        println("Solving:");
        solve (26);
    }
    def encrypt(){
        val encrypted = word.map(c =>
            if(c = ', ')
            }
            else {
                alpha ((c - 'A' + shiftAmount + 26) % 26)
        word = encrypted;
        println("Encrypted: " + word);
    }
    def decrypt(){
        val decrypted = word.map(c =>
            if (c == ', '){
            } else {
                alpha ((c - 'A' - shiftAmount + 26) % 26)
```

```
}
        word = decrypted;
        println("Decrypted: " + word);
    }
    def solve (maxShift: Integer) {
        val decrypted = word.map(c =>
            if(c = ', ')
                ^{\mathrm{c}}
            } else {
                alpha ((c - 'A' - maxShift + 26) % 26)
        )
        word = decrypted;
        println("Caesar " + maxShift + ": " + word);
        if (\max Shift \le 1)
            return;
        solve (\max Shift - 1);
    }
}
Scala Output
Shift: 15
Encrypted: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID
Decrypted: THIS IS A TEST MESSAGE FROM JOHN ELETTO
Solving:
Caesar 26: THIS IS A TEST MESSAGE FROM JOHN ELETTO
Caesar 25: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP
Caesar 24: WKLV LV D WHWW PHVVDJH IURP MRKQ HOHWWR
Caesar 23: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU
Caesar 22: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY
Caesar 21: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID
Caesar 20: OCDN DN V OZNO HZNNVBZ AMJH EJCI ZGZOOJ
Caesar 19: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ
Caesar 18: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY
Caesar 17: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH
Caesar 16: WKLV LV D WHWW PHVVDJH IURP MRKQ HOHWWR
Caesar 15: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC
```

Caesar 14: THIS IS A TEST MESSAGE FROM JOHN ELETTO Caesar 13: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB Caesar 12: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP Caesar 11: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 10: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 7: BPQA QA I BMAB UMAAIOM NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 5: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 4: MABL BL T MXIM FXLLTZX YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 2: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC Caesar 1: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB

#### Shift: 21

Encrypted: OCDN DN V OZNO HZNNVBZ AMJH EJCI ZGZOOJ Decrypted: THIS IS A TEST MESSAGE FROM JOHN ELETTO Solving: Caesar 26: THIS IS A TEST MESSAGE FROM JOHN ELETTO Caesar 25: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP Caesar 24: WKLV LV D WHVW PHVVDJH IURP MRKQ HOHWWR Caesar 23: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 22: DRSC SC K DOCD WOCCKQO PBYW TYRX OVODDY Caesar 21: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 20: OCDN DN V OZNO HZNNVBZ AMJH EJCI ZGZOOJ Caesar 19: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 18: DRSC SC K DOCD WOCKQO PBYW TYRX OVODDY Caesar 17: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH Caesar 16: WKLV LV D WHVW PHVVDJH IURP MRKQ HOHWWR Caesar 15: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC Caesar 14: THIS IS A TEST MESSAGE FROM JOHN ELETTO Caesar 13: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB Caesar 12: UIJT JT B UFTU NFTTBHF GSPN KPIO FMFUUP Caesar 11: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE Caesar 10: ZNOY OY G ZKYZ SKYYGMK LXUS PUNT KRKZZU Caesar 9: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 8: IWXH XH P ITHI BTHHPVT UGDB YDWC TATIID Caesar 7: BPQA QA I BMAB UMAAIOM NZWU RWPV MIMBBW Caesar 6: VJKU KU C VGUV OGUUCIG HTQO LQJP GNGVVQ Caesar 5: QEFP FP X QBPQ JBPPXDB COLJ GLEK BIBQQL Caesar 4: MABL BL T MXLM FXLLTZX YKHF CHAG XEXMMH Caesar 3: JXYI YI Q JUIJ CUIIQWU VHEC ZEXD UBUJJE

Caesar 2: HVWG WG O HSGH ASGGOUS TFCA XCVB SZSHHC

# Caesar 1: GUVF VF N GRFG ZRFFNTR SEBZ WBUA RYRGGB