



High Octane Compression

A “Coder’s Corner” Presentation
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For The Edmonton SAS User Group

November 7, 2013

Let's Get Rid Of Some Blanks In Our Text Strings

Y = COMPRESS (X) ;

A Typical Problem Might Be:

If X = 'T0A 0AO' Then Y = 'T0A0A0'

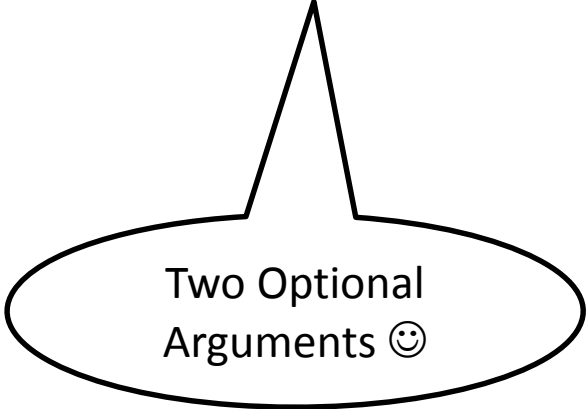
Is COMPRESS Really Just An Innocent Little Function?

It's A Veritable Vixen!

A Demon In Disguise!

A She Wolf In The Closet!

`COMPRESS (<source> <, chars> <, modifiers>)`



Two Optional
Arguments 😊

Remember A Line Kind Of Like This?

x = 'The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!'

There Is Only One Lazy Dog

```
y = compress(x, '01s');
```

Take Out
The '101'

Take Out
The 's'

X = The Quick Brown Fox Jumped Over The **101** "Lazy" Dog**s**!
Y = The Quick Brown Fox Jumped Over The "Lazy" Dog!

Oops! Left A
Double Space ☹️

An Easy Fix For Multiple Blanks When The Can Be Only One

```
y = compbl (compress (x, '01s')) ;
```

Take Out
The '101'


Take Out
The 's'

X = The Quick Brown Fox Jumped Over The **101** "Lazy" Dog**s**!
Y = The Quick Brown Fox Jumped Over The "Lazy" Dog!

No Double
Space 😊

Another Way To Get Rid Of Just Those Numbers

```
y = compbl (compress (x, , 'd')) ;
```




Take Out
The '101'

X = The Quick Brown Fox Jumped Over The **101** "Lazy" Dogs!
Y = The Quick Brown Fox Jumped Over The "Lazy" Dogs!

I Don't Like Those Punctuation Marks

```
y = compress(x, , 'P');
```



Take Out The
Double Quotes '“”'

```
X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!  
Y = The Quick Brown Fox Jumped Over The 101 Lazy Dogs
```



Took Out The
Exclamation Mark '!'

The Exclamation Mark Is OK, It's Those Quotation Marks I Can't Stand!

```
y = compress(x, ' " ');
```


A yellow speech bubble pointing to the right, containing the text "Take Out Just The Double Quotes ' \"' ".

Take Out Just The
Double Quotes ' \"'

```
X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!  
Y = The Quick Brown Fox Jumped Over The 101 Lazy Dogs!
```

Let's Just Keep The Numbers

```
y = compress(x, , 'kd');
```



Keep Just The
Numbers

```
X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!  
Y = 101
```

The Compress List Is Case Sensitive

```
y = compress(x, 'D');
```

X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!
Y = The Quick Brown Fox Jumped Over The 101 "Lazy" ogs!

Kept The 'd' In
'Jumped' ☹️

Took Out The 'D'
In 'Dogs' 😊

Eliminating Case Sensitivity

```
y = compress(x, 'D', 'I');
```

X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!
Y = The Quick Brown Fox Jumps Over The 101 "Lazy" Dogs!

Took Out The 'd'
In 'Jumped' 😊

Took Out The 'D'
In 'Dogs' 😊

All The Modifiers

- A - Adds alphabetic characters to the list of characters.
- C - Adds control characters to the list of characters.
- D - Adds digits to the list of characters.
- F - Adds the underscore character and English letters to the list of characters.
- G - Adds graphic characters to the list of characters.
- H - Adds a horizontal tab to the list of characters.
- I - Ignores the case of the characters to be kept or removed.
- K - Keeps the characters in the list instead of removing them.
- L - Adds lowercase letters to the list of characters.
- N - Adds digits, the underscore character, and English letters to the list of characters.
- O - Processes the second and third arguments once rather than every time the COMPRESS function is called.
- P - Adds punctuation marks to the list of characters.
- S - Adds space characters (blank, horizontal tab, vertical tab, carriage return, line feed, and form feed) to the list of characters.
- T - Trims trailing blanks from the first and second arguments.
- U - Adds uppercase letters to the list of characters.
- W - Adds printable characters to the list of characters.
- X - Adds hexadecimal characters to the list of characters.

The Dogs Aren't Lazy After All

```
y = compbl (compress (x, ' "Lazy' ) ) ;
```

This only works because L, a, z, y and “ don't appear elsewhere in the string.

Took Out The Word
'Lazy' 😊

X = The Quick Brown Fox Jumped Over The 101 "Lazy" Dogs!
Y = The Quick Brown Fox Jumped Over The 101 Dogs!

Took Out The Double
Quotes "" 😊

No Double
Spaces 😊

WARNING!!

COMPRESS and COMPBL are designed for use with single byte character sets only. if we are working with double byte character sets, we need to use KCOMPRESS instead.

The COMPRESS Function

Truly Sly And Cunning

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