



# High Octane Compression

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

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# 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'

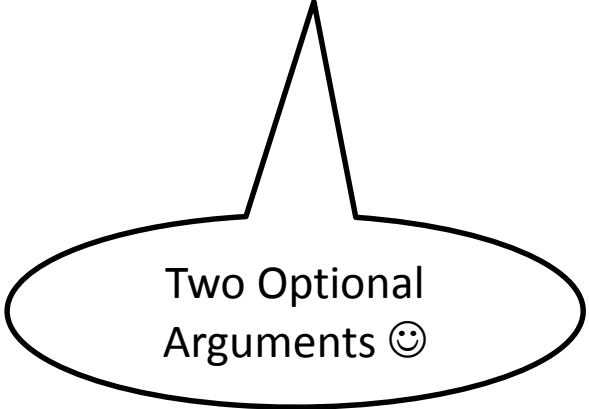
**Is COMPRESS Really Just An Innocent Little Function?**

**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<sup>d</sup> Over The 101 "Lazy" <sup>D</sup>Dogs!  
Y = The Quick Brown Fox Jumpe Over The 101 "Lazy" ogs!

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**

**John Fleming**

**John.fleming @ albertahealthservices.ca**

**(780) 643 - 4341**