

**Harbour Guide**

## **GT\_ASCPOS()**

Return the ascii value of a specified character in a string

### **Syntax**

```
GT_Ascpos(<cStr>, <nPos>) --> nAscVal
```

### **Arguments**

<cStr>     - The string   <nPos>   - The position in <cStr>

### **Returns**

<nAscVal>   - The ascii value of substr(<cStr>, <nPos>, 1)

### **Description**

Return the ascii value of a specified character in a string   Equivalent (but much faster) to   asc(substr(cStr, nPos, 1)

NOTE:   invalid parameters will return -1   nPos > len(cStr)   will return -2

This last behaviour is different to the Funky function of the same name. I changed the behaviour because some of the strings I process contain embedded NULs.

### **Examples**

```
? gt_ascpos("the cat sat on the mat", 3) // prints e
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_ASCIIISUM( )**

Sum the ascii values in a string.

### **Syntax**

```
GT_AsciiSum(<cStr>) --> nSum
```

### **Arguments**

<cStr>     - The string to sum

### **Returns**

<nSum>     - The sum of all ascii values in <cStr>.

### **Description**

Sum the ascii value of every character in the passed string and return the result.

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_ATDIFF( )**

Return the position where two strings begin to differ

### **Syntax**

```
GT_AtDiff(<cStr1>, <cStr2>) --> nPos
```

### **Arguments**

**<cStr1>**     - A character string to compare  
with  
**<cStr2>**     - The string to compare

### **Returns**

**<nPos>**       - The position in <cStr2> where <cStr1> begins to differ

### **Description**

Return the position in <cStr2> where <cStr1> begins to differ. If the strings differ in the first character GT\_AtDiff() will return 1. If the two strings are identical (or identical upto the last character in <cStr2>) the function will return 0.

NOTE: invalid parameters will return -1

### **Examples**

```
? gt_atDiff("the cat", "the rat")            // prints 5  
? gt_atDiff("the cat", "the ")             // prints 0
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_CHAREVEN( )**

Return a string of all the characters in even positions

### **Syntax**

```
GT_CharEven(<cStr>) --> cRet
```

### **Arguments**

<cStr>        - A character string to extract chars from

### **Returns**

<cRet>        - A string of all the chars in even positions

### **Description**

Return a string consisting of all the characters in even positions in <cStr1>.

NOTE: invalid parameters will return ""

### **Examples**

```
? gt_CharEven("abcdefghijklm")                      // prints "bdfhjl"
```

### **Status**

Ready

### **Files**

Library is libgt

## GT\_CHARMIX()

Amalgamate two strings to form the return value

### Syntax

```
GT_CharMix(<cStr1>, <cStr2>) --> cRet
```

### Arguments

<cStr1>     - A character string to mix <cStr2>     - A character string to mix with

### Returns

<cRet>         - A string consisting of all the characters in <cStr1> mixed with all the characters in <cStr2>

### Description

Return a string consisting of all the characters in <cStr1> mixed with the characters from <cStr2>.

NOTE: invalid parameters will return ""

### Examples

```
? gt_CharMix("abc", "123")           // prints "alb2c3"
? gt_CharMix("abcde", "123")         // prints "alb2c3de"
? gt_CharMix("abc", "12345")         // prints "alb2c345"
```

### Status

Ready

### Files

Library is libgt

## **GT\_CHARODD( )**

Return a string of all the characters in odd positions

### **Syntax**

```
GT_CharOdd(<cStr>) --> cRet
```

### **Arguments**

<cStr>        - A character string to extract chars from

### **Returns**

<cRet>        - A string of all the chars in odd positions

### **Description**

Return a string consisting of all the characters in odd positions in <cStr1>.

NOTE: invalid parameters will return ""

### **Examples**

```
? gt_CharOdd("abcdefghijklm")                      // prints "acegikm"
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_CHRCOUNT()**

Count the number of times a character appears in a string

### **Syntax**

```
GT_Chrcount(<cChr>, <cStr>) --> nFreq
```

### **Arguments**

**<cChr>** - The character to find the frequency of  
**<cStr>** - The string in which to find the character

### **Returns**

### **Description**

GT\_Chrcount() counts how many times a specified character appears in a string.

NOTE: invalid parameters will return -1

### **Examples**

```
? GT_Chrcount("t", "the cat sat on the mat") // prints 4
```

### **Status**

Ready

### **Files**

Library is libgt



## **GT\_CHRFIRST()**

Find which character occurs first in a string

### **Syntax**

```
GT_ChrFirst(<cChars>, <cStr>) --> nAsc
```

### **Arguments**

<cChars>    - The set of characters to find    <cStr>    - The input string

### **Returns**

<nAsc>        - The ASCII value of the first character in <cChars> which appears first in <cStr>

### **Description**

Return the ascii value of a character in <cChars> which appears first in <cStr>.

### **Examples**

```
? chr(GT_ChrFirst("sa ", "This is a test")) // prints "s"
? chr(GT_ChrFirst("et", "This is a test"))  // prints "t"
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_CHRTOTAL( )**

Find number of times a set of characters appears in a string

### **Syntax**

```
GT_ChrTotal(<cChrs>, <cStr>) --> nTotOcc
```

### **Arguments**

<cChrs> - The set of characters <cStr> - The string to search

### **Returns**

<nTotOcc> - The number of times the characters specified in <cChrs> appears in <cStr>

### **Description**

Returns the number of occurrences of characters belonging to the set <cChrs> in the string <cStr>. If no characters in <cChrs> appears in <cStr> GT\_ChrTotal() will return 0.

NOTE: invalid parameters will return -1

### **Examples**

```
local cStr1 := "the cat sat on the mat"

? GT_ChrTotal("tae", cStr1)           // prints 10
? GT_ChrTotal("zqw", cStr1)          // prints 0
```

### **Status**

Ready

### **Files**

Library is libgt

## GT\_STRCOUNT( )

Count the number of times a substring appears in a string

### Syntax

```
GT_StrCount(<cChrs>, <cStr>) --> nFreq
```

### Arguments

**<cChrs>** - The substring to find the frequency of  
**<cStr>** - The string in which to find the character

### Returns

**<nFreq>** - The number of times <cChrs> occurs in <cStr>

### Description

GT\_StrCount() counts how many times a specified substring appears in a string. If the substring does NOT appear in <cStr> this function will return 0. If the substring is a single character use GT\_ChrCount() as it will be faster.

NOTE: invalid parameters will return -1

### Examples

```
? GT_StrCount("the", "the cat sat on the mat") // prints 2
```

### Status

Ready

### Files

Library is libgt

## **GT\_STRCSPN( )**

Return length of prefix in string of chars NOT in set.

### **Syntax**

```
GT_strcspn(<cString>, <cSet>) --> nLength
```

### **Arguments**

**<cString>** - The string to find the prefix in **<cSet>** - The set of characters

### **Returns**

**<nLength>** - The length of a string upto a character in the set

### **Description**

Return the number of characters in the leading segment of a string that consists solely of characters NOT in the set.

### **Examples**

```
? GT_strcspn("this is a test", "as ") // prints 3
? GT_strcspn("this is a test", "elnjq") // prints 11
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_STRDIFF( )**

Return a string where it begins to differ from another

### **Syntax**

```
GT_StrDiff(<cStr1>, <cStr2>) --> cRet
```

### **Arguments**

**<cStr1>**     - A character string to compare  
with

**<cStr2>**     - The string to compare

### **Returns**

**<cRet>**       - A string beginning at the position in <cStr2> where <cStr1> begins to differ from <cStr1>

### **Description**

Return a string beginning at the position in <cStr2> where <cStr1> begins to differ from <cStr1>. If the two strings are identical (or identical upto the last character in <cStr2>) the function will return "".

NOTE:   invalid parameters will return ""

### **Examples**

```
? gt_strDiff("the cat", "the rat")                // prints "rat"  
? gt_strDiff("the cat", "the ")                   // prints ""
```

### **Status**

Ready

### **Files**

Library is libgt

## GT\_STREXPAND()

Insert fillers between characters in a passed string

### Syntax

```
GT_StrExpand(<cStr>, [<nNum>], [<cChar>]) --> cRet
```

### Arguments

**<cStr1>** - A character string to insert chars into  
**<nNum>** - The number of fill characters to insert (default 1)  
**<cChar>** - The fill character (default space)

### Returns

**<cRet>** - The input string with fill characters inserted between every character in the original.

### Description

Inserts fill characters into a string.

NOTE: invalid parameters will return ""

### Examples

```
? gt_strexpand("abc")           // prints "a b c"  
? gt_strexpand("abc", 2)        // prints "a  b  c"  
? gt_strexpand("abc", 2, 'p')   // prints "appbppc"
```

### Status

Ready

### Files

Library is libgt

## **GT\_STRLEFT( )**

Find length of prefix of a string

### **Syntax**

```
GT_StrLeft(<cStr>, <cChars>) --> nLen
```

### **Arguments**

<cStr>        - The input string <cChars> - The set of characters to find

### **Returns**

### **Description**

Return the length of the leading segment in the passed string <cStr> that consists solely of the characters in the character set <cChars>.

If no characters in the the search set are found, the function shall return 0

### **Examples**

```
? GT_StrLeft("this is a test", "hsit ")        // prints 8
? GT_StrLeft("this is a test", "hit a")        // prints 3
? GT_StrLeft("this is a test", "zxy")        // prints 0
```

### **Status**

Ready

### **Files**

Library is libgt

## **GT\_STRPBRK( )**

Return string after 1st char from a set

### **Syntax**

```
GT_StrpBrk(<cStr>, <cSet>) --> cString
```

### **Arguments**

<cStr>        - The input string    <cSet>        - The set of characters to find

### **Returns**

<cString>    - The input string after the first occurrence of any character  
from <cSet>

### **Description**

Return a string after the first occurrence of any character from the input set  
<cSet>.

### **Examples**

```
? GT_Strpbrk("This is a test", "sa ") // prints "s is a test"  
? GT_Strpbrk("This is a test", "et") // prints "test"
```

### **Status**

Ready

### **Files**

Library is libgt



## **GT\_STRRIGHT()**

Find length of a suffix of a string

### **Syntax**

```
GT_StrRight(<cStr>, <cChars>) --> nLen
```

### **Arguments**

<cStr>        - The input string <cChars> - The set of characters to find

### **Returns**

<nLen>        - The length of the prefix found.

### **Description**

Return the length of the trailing segment in the passed string <cStr> that consists solely of the characters in the character set <cChars>.

If no characters in the the search set are found, the function shall return 0

### **Examples**

```
? GT_StrRight("this is a test", "teas ")        // prints 8
? GT_StrRight("this is a test", "tes h")        // prints 5
? GT_StrRight("this is a test", "zxy")        // prints 0
```

### **Status**

Ready

### **Files**

Library is libgt