## [8.7] Replacement for mid() and right() functions use position instead of count

The built-in *mid()* function has the syntax *mid(string, start [,count])* when used with a string argument. *count* characters are returned from *string*, beginning at character *start*. Sometimes it is more convenient to extract characters from a *start* position to an *end* position, instead of a number of characters. It is trivial to find

```
count = end - start + 1
```

but it may be useful to define it as a function:

```
mid1(s,n,m)
Func
@(s,n,m) return elements from n to m of s
@7novØ1/dburkett@infinet.com
mid(s,n,m-n+1)
EndFunc
```

For example, mid1("abcdefghi", 3, 7) returns "cdefg".

The built-in mid() function also operates on lists, and so does mid1(), since it calls mid(). For this reason, the default behavior of mid1() is the same as mid().

We can also write a similar replacement function for *right()* which uses a position for the argument, instead of the number of elements:

```
right1(s,p)
Func
@(s,p) return right elements from p of s
@7novØ1/dburkett@infinet.com
right(s,dim(s)-p+1)
EndFunc
```

For example, right1("123456789",7) returns "789".

We don't need a replacement function for *left()*, because the number of elements used as the argument in that function *is* the position in the string.