


Project AnaCrisis	AnaCrisis User's Manual	Language en_UK
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### TIP

 +, which is equivalent to no-operation on numbers, may be used to force a conversion from string to number..

## 2.6.6. Part reference operator


```
expr8 ::= operand [ [ start [ , length ] ] ] ...
```

The part reference (or substring) operator is a 2- or 3-symbol operator [ , ]. When used, it forces character context and causes conversion of its left operand to string if necessary.

It extracts a substring of *length* code points, starting at position *start*, counted from 1, out of its left operand. The parameters are numeric expressions (yielding numbers after conversion if necessary).

- If *length* is omitted, it defaults to 1.
- To offer easy access to the end of the string, *length* may be given as \*, requesting “the rest of the string, starting at *start*”.
- To extract the last *length* code points without computing the starting position, *start* is replaced with \*.

### NOTE


 Specifying a *start* index larger than the string length is an error.

If *start+length-1* is beyond the end of the string, the operator behaves as if the string was padded with spaces.

Examples:

```
Event = "New Year's Eve"
"New Year's Eve" [5,4] // result: Year
Event [1]             // result: N
"New Year's Eve" [12,*] // result: Eve
Event [*,3]           // result: Eve
Event [*,]            // result: e
Event [*,*]           // result: e
```

### TIP

 To get a run of exactly *n* spaces, extract them out of a single-space string. Note you can't apply this trick to a null string because it contains zero characters and start index must be at least 1, which is already outside the null string.

```
" "[1, n] // result: exactly n spaces
```