Identification

The EPL run-time routine, catstr_.
catstr_$catstrc_
catstr_$catstrb_

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Purpose

Catstr_ implements the PL/I string concatenation operations.

Usage

Catstr_ accepts any number of strings either varying or
non-varying as arguments. The last argument is the result
of concatenating the preceding arguments. If the last
string is non-varying and has a greater length than the
sum of the lengths of the concatenated strings, the
concatenated string is extended on the right with a padding
byte. The byte is `0` b for catstrb_ and ASCII blank
for catstrc_.

The calls are

         call catstr_$catstrc_(s1,s2,---sn,c)

             c=s1||s2||---||sn

         call catstr_$catstrb_(s1,s2,---sn,b)

             b=s1||s2||---||sn

where sj is a string, c is a character string and b is
a bit string.

EPL has not been implemented to concatenate more than
two strings at a time but by using the call statement
an EPL programmer can prevent the compiler from creating
unnecessary temporary storage. If the last string is
non-varying and any of the concatenated strings overlaps
it, a varying string temporary is created for the answer
which is moved to the proper non-varying location when
the concatenation is completed. This avoids trouble with
a statement such as

                    b=a||b

EPL compiles either of two calls to stgop_ to concatenate
strings. stgop_ will then always call catstr_ as follows:

```
call stgop_$ctcs_(c1,c2,c3);

call catstr_$catstrc_(c1,c2,c3);

        c3=c1||c2;

call stgop_$ctbs_(b1,b2,b3);

call catstr_$catstrb_(b1,b2,b3);

        b3=b1||b2;
```

where c1, c2, and c3 are character strings and b1, b2
and b3 are bit strings.

Error

If any argument is not a string, will stop on oct 0.