Identification

Symbolic reference to unavailable graphic character constants
upper_case_char, punctuation_char.
Charles Garman

Purpose

This section describes two library data segments, upper_case_char
and punctuation_char, for symbolic reference to graphic
characters currently unavailable in character-string constants;
it is to be withdrawn when all ASCII graphics are available
in EPL, or when full PL/I arrives.

Background

Although the data character set for EPL is full 7-bit
ASCII, at this writing the 26 upper-case alphabetic graphics
and 12 of the punctuation-type graphics may not appear
in EPL character-string literals. Specifically the upper-case
alphabet maps into its lower-case counterpart, while the
12 non-language-character-set graphics map into the percent
sign (%, octal 045). Until this situation is changed,
either with later versions of EPL or the appearance of
full PL/I, these graphics will be available symbolically
in a similar manner to those in the data segment ctl_char
(BY.8.01).

Usage

For each character which a program wishes to reference,
the following declaration would appear

    dcl upper_case_char$lower_case_graphic char(1) ext;

or

    dcl punctuation_char$character_name char(1) ext;

For the upper-case characters, lower_case_graphic is simply
the single lower-case counterpart of the desired character,
e.g. "a". For punctuation characters, the graphics, names,
and octal values are given below.
<table>
<thead>
<tr>
<th>Graphic</th>
<th>Name</th>
<th>Octal Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>exclamation_point</td>
<td>041</td>
</tr>
<tr>
<td>#</td>
<td>number_sign</td>
<td>043</td>
</tr>
<tr>
<td>%</td>
<td>percent</td>
<td>045</td>
</tr>
<tr>
<td>'</td>
<td>acuteAccent</td>
<td>047</td>
</tr>
<tr>
<td>@</td>
<td>commercial_at</td>
<td>100</td>
</tr>
<tr>
<td>[</td>
<td>open_bracket</td>
<td>133</td>
</tr>
<tr>
<td>\</td>
<td>left_slant</td>
<td>134</td>
</tr>
<tr>
<td>]</td>
<td>close_bracket</td>
<td>135</td>
</tr>
<tr>
<td>{</td>
<td>grave_accent</td>
<td>140</td>
</tr>
<tr>
<td>}</td>
<td>open_brace</td>
<td>173</td>
</tr>
<tr>
<td>}</td>
<td>close_brace</td>
<td>175</td>
</tr>
<tr>
<td>~</td>
<td>tilde</td>
<td>176</td>
</tr>
</tbody>
</table>

**Implementation**

These segments are created in essentially similar fashion as ctl_char (BY.8.01).