C0 Controls and Basic Latin
Range: 0000–007F

The Unicode Standard, Version 15.1
This file contains a excerpt from the character code tables and list of character names for
The Unicode Standard, Version 15.1

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See https://www.unicode.org/errata/ for an up-to-date list of errata.

See https://www.unicode.org/charts/ for access to a complete list of the latest character code charts.
See https://www.unicode.org/charts/PDF/Unicode-15.1/ for charts showing only the characters added in Unicode 15.1.
See https://www.unicode.org/Public/15.1.0/charts/ for a complete archived file of character code charts for Unicode 15.1.
See https://www.unicode.org/charts/About.html#Conventions for conventions used in these code charts, and other
general information.

Disclaimer
These charts are provided as the online reference to the character contents of the Unicode Standard, Version 15.1 but do
not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete
understanding of the use of the characters contained in this file, please consult the appropriate sections of The Unicode
Standard, Version 15.1, online at https://www.unicode.org/versions/Unicode15.1.0/, as well as Unicode Standard Annexes
#9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, #44, #45, and #50, the other Unicode Technical Reports and Standards,
and the Unicode Character Database, which are available online.

See https://www.unicode.org/ucd/ and http://www.unicode.org/reports/
A thorough understanding of the information contained in these additional sources is required for a successful
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See https://www.unicode.org/pending/pending.html and http://www.unicode.org/alloc/Pipeline.html.
See https://www.unicode.org/charts/About.html for more information concerning the conventions and symbols used in
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C0 controls

Alias names are those for ISO/IEC 6429:1992. Commonly used alternative aliases are also shown.

0000 <control> = NULL
0001 <control> = START OF HEADING
0002 <control> = START OF TEXT
0003 <control> = END OF TEXT
0004 <control> = END OF TRANSMISSION
0005 <control> = ENQUIRY
0006 <control> = ACKNOWLEDGE
0007 <control> = BELL
0008 <control> = BACKSPACE
0009 <control> = CHARACTER TABULATION
000A <control> = LINE FEED (LF)
000B <control> = LINE TABULATION
000C <control> = FORM FEED (FF)
000D <control> = CARRIAGE RETURN (CR)
000E <control> = SHIFT OUT
000F <control> = SHIFT IN
0010 <control> = DATA LINK ESCAPE
0011 <control> = DEVICE CONTROL ONE
0012 <control> = DEVICE CONTROL TWO
0013 <control> = DEVICE CONTROL THREE
0014 <control> = DEVICE CONTROL FOUR
0015 <control> = NEGATIVE ACKNOWLEDGE
0016 <control> = Synchronous IDLE
0017 <control> = END OF TRANSMISSION BLOCK
0018 <control> = CANCEL
0019 <control> = END OF MEDIUM

001A <control> = SUBSTITUTE
001B <control> = ESCAPE
001C <control> = INFORMATION SEPARATOR FOUR
001D <control> = INFORMATION SEPARATOR THREE
001E <control> = INFORMATION SEPARATOR TWO
001F <control> = INFORMATION SEPARATOR ONE

ASCII punctuation and symbols

Based on ISO/IEC 646.

0020 SPACE

• sometimes considered a control code
• other space characters: 2000–200A

0021 EXCLAMATION MARK

• factorial
• bang

0022 QUOTATION MARK

• double quote
• neutral (vertical), used as opening or closing quotation mark
• preferred characters in English for paired quotation marks are 201C & 201D
• 05F4 ꞅ is preferred for gershayim when writing Hebrew

0023 PLUS SIGN

• plus or minus sign
• plus

0024 GRAVE ACCENT

• grave accent
• inverted grave

0025 HYPHEN-MINUS

• minus
• hyphen

0026 DIAERETIC SIGN

• diaeresic sign
• underhook

0027 ACUTE ACCENT

• acute accent
• inverted acute

0028 CEDILLA

• cedilla
• inverted cedilla

0029 CARON

• caron
• inverted caron

002A MACRON

• macron
• inverted macron

002B RING

• ring
• overring

002C CIRCUMFLEX ACCENT

• circumflex accent
• inverted circumflex

002D TILDE

• tilde
• inverted tilde

002Ebreve

• breve
• inverted breve

002F dotless i

• dotless i
• inverted dotless i

0030 NABAT

• nabat
• inverted nabat

0031 AH

• ah
• inverted ah

0032 Damma

• dama
• inverted dama

0033 Kasra

• kasr
• inverted kasr

0034 Shadda

• shadda
• inverted shadda

0035 Fatha

• fatha
• inverted fatha

0036 Kaf Hafsa

• kaf hafsa
• inverted kaf hafsa

0037 Qati’ah

• qati’ah
• inverted qati’ah

0038 Sukun

• sukun
• inverted sukun

0039 Hamza with dot

• hamza with dot
• inverted hamza with dot

003A Dot above

• dot above
• inverted dot above

003B Dot below

• dot below
• inverted dot below

003C Dot below left

• dot below left
• inverted dot below left

003D Dot below right

• dot below right
• inverted dot below right

003E Yeh

• yeh
• inverted yeh

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0023  #  NUMBER SIGN
= pound sign (weight)
= hashtag, hash
= crosshatch, octothorpe
• for denoting musical sharp 266F # is preferred
→ 2114 ₣ l b bar symbol
→ 2116 № numero sign
→ 2317 ‣ viewdata square
→ 266F # music sharp sign
→ 29E3 ‡ equals sign and slanted parallel

0024  $  DOLLAR SIGN
= milréis, escudo
• used for many peso currencies in Latin America and elsewhere
• glyph may have one or two vertical bars
• other currency symbol characters start at 2040 ₡
→ 0042 ¢ cent sign
→ 0044 ¤ currency sign
→ 2081 ℼ peso sign
→ 1F4B2 ₿ heavy dollar sign

0025  %  PERCENT SIGN
→ 066A ‰ arabic percent sign
→ 2030 %¢ per mille sign
→ 2031 %‰ per ten thousand sign
→ 2052 ℅ commercial minus sign

0026  &  AMPERSAND
= and
• originally derived from a ligature of 'e' and 't'
→ 204A ‿ tironian sign et
→ 214B ☲ turned ampersand
→ 1F674 ☲ heavy ampersand ornament

0027  ’  APOSTROPHE
= apostrophe-quote (1.0)
= single quote
= APL quote
• neutral (vertical) glyph with mixed usage
• 2019 ’ is preferred for apostrophe
• preferred characters in English for paired quotation marks are 2018 ‘ & 2019 ’
• 05F3 ’ is preferred for geres when writing Hebrew
→ 02B9 ’ modifier letter prime
→ 02BC¹ modifier letter apostrophe
→ 02CB¹ modifier letter vertical line
→ 0301 ¤ combining acute accent
→ 030D ¤ combining vertical line above
→ 05F3 ’ hebrew punctuation geres
→ 2018 ‘ left single quotation mark
→ 2019 ’ right single quotation mark
→ 2032 ’ prime
→ A79C¹ latin small letter salltillo

0028  (  LEFT PARENTHESIS
= opening parenthesis (1.0)

0029  )  RIGHT PARENTHESIS
= closing parenthesis (1.0)
• see discussion on semantics of paired bracketing characters

002A  *  ASTERISK
= star
• can have five or six spokes
→ 0660 * arabic five pointed star
→ 2038 ⨀ reference mark
→ 2042 ⋄ asterism
→ 204E * low asterisk
→ 2051 ⋄ two asterisks aligned vertically
→ 20F0 ⋄ combining asterisk above
→ 2217 * asterisk operator
→ 26B9 * sextile
→ 2731 ⋄ heavy asterisk
→ A673 ⋄ slavonic asterisk
→ 1F7B6 ⋄ medium six spoked asterisk

ASCII math operator
002B  +  PLUS SIGN
→ 02D6 + modifier letter plus sign
→ 2212 − minus sign
→ 2795 + heavy plus sign
→ FB29 + hebrew letter alternative plus sign
→ 1F7A2 + light greek cross

ASCII punctuation
002C  ,  COMMA
= the use as decimal or thousands separator is locale dependent
→ 060C , arabic comma
→ 066B , arabic decimal separator
→ 201A , single low-9 quotation mark
→ 2E12 hypodiasole
→ 2E41 reversed comma
→ 2E4C medieval comma
→ 3001 , ideographic comma

002D  -  HYPHEN-MINUS
= hyphen, dash
= minus sign
• used generically for hyphen, minus sign or en dash, all of which have dedicated alternatives
→ 0040 [− soft hyphen
→ 02D7 ‐ modifier letter minus sign
→ 2010 − hyphen
→ 2011 ‐ non-breaking hyphen
→ 2012 — figure dash
→ 2013 — en dash
→ 2027 ‐ hyphenation point
→ 2043 • hyphen bullet
→ 2212 − minus sign
→ 10191 − roman uncia sign

002E  .  FULL STOP
= period, dot, decimal point
• the use as decimal point is locale dependent
• may be rendered as a raised decimal point in old style numbers
→ 00B7 · middle dot
→ 06D4 . arabic full stop
→ 2024 . one dot leader
→ 2026 … horizontal ellipsis
→ 2E33 · raised dot
→ 2E3C · stenographic full stop
→ 3002 . ideographic full stop
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<table>
<thead>
<tr>
<th>Code Point</th>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>006C</td>
<td>LATIN SMALL LETTER L</td>
<td>→ U+2113 l script small l</td>
</tr>
<tr>
<td>006D</td>
<td>LATIN SMALL LETTER M</td>
<td>→ U+1D4C1 ℓ mathematical script small l</td>
</tr>
<tr>
<td>006E</td>
<td>LATIN SMALL LETTER N</td>
<td>→ U+207Fⁿ superscript latin small letter n</td>
</tr>
<tr>
<td>006F</td>
<td>LATIN SMALL LETTER O</td>
<td>→ U+1DOF o latin letter small capital o</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2134 KeyCode o script small o</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+1AB3D a latin small letter blackletter o</td>
</tr>
<tr>
<td>0070</td>
<td>LATIN SMALL LETTER P</td>
<td></td>
</tr>
<tr>
<td>0071</td>
<td>LATIN SMALL LETTER Q</td>
<td>→ U+051B KeyCode qa cyrillic small letter qa</td>
</tr>
<tr>
<td>0072</td>
<td>LATIN SMALL LETTER R</td>
<td></td>
</tr>
<tr>
<td>0073</td>
<td>LATIN SMALL LETTER S</td>
<td>→ U+017F  кудышка latin small letter long s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+1A731 s latin letter small capital s</td>
</tr>
<tr>
<td>0074</td>
<td>LATIN SMALL LETTER T</td>
<td></td>
</tr>
<tr>
<td>0075</td>
<td>LATIN SMALL LETTER U</td>
<td></td>
</tr>
<tr>
<td>0076</td>
<td>LATIN SMALL LETTER V</td>
<td></td>
</tr>
<tr>
<td>0077</td>
<td>LATIN SMALL LETTER W</td>
<td>→ U+051D  KeyCode we cyrillic small letter we</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+1021 KeyCode w latin letter small capital w</td>
</tr>
<tr>
<td>0078</td>
<td>LATIN SMALL LETTER X</td>
<td>→ U+00D7 x multiplication sign</td>
</tr>
<tr>
<td>0079</td>
<td>LATIN SMALL LETTER Y</td>
<td></td>
</tr>
<tr>
<td>007A</td>
<td>LATIN SMALL LETTER Z</td>
<td>→ U+01B6  KeyCode z latin small letter z with stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+1D22  KeyCode z latin letter small capital z</td>
</tr>
</tbody>
</table>

**ASCII punctuation and symbols**

<table>
<thead>
<tr>
<th>Code Point</th>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>007B</td>
<td>LEFT CURLY BRACKET</td>
<td>= opening curly bracket (1.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= left brace</td>
</tr>
<tr>
<td>007C</td>
<td>VERTICAL LINE</td>
<td>= vertical bar, pipe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• used in pairs to indicate absolute value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• also used as an unpaired separator or as a fence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+0061  KeyCode broken bar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+01C0  KeyCode dental click</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+05C0  KeyCode hebrew punctuation paseq</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+0964  KeyCode devanagari danda</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+20D2  KeyCode combining long vertical line overlay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2223  KeyCode divides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2758  KeyCode light vertical bar</td>
</tr>
<tr>
<td>007D</td>
<td>RIGHT CURLY BRACKET</td>
<td>= closing curly bracket (1.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= right brace</td>
</tr>
<tr>
<td>007E</td>
<td>TILDE</td>
<td>= this is a spacing character</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+02DC  KeyCode small tilde</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+0303  KeyCode tilde</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+0334  KeyCode combining tilde overlay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2053  KeyCode swung dash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+223C  KeyCode tilde operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2E1B  KeyCode tilde with ring above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+2E2F  KeyCode vertical tilde</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+301C  KeyCode wave dash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ U+FF5E  KeyCode fullwidth tilde</td>
</tr>
</tbody>
</table>

**Control character**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>007F</td>
<td>&lt;CONTROL&gt;</td>
<td>= DELETE</td>
</tr>
</tbody>
</table>

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