

# UTF-8 encoding table and Unicode characters

## page with code points U+0000 to U+01FF

[help/imprint](#) ([Hilfe/Impressum](#))

|                                                  |                                                                                                                                                                                                                                 |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| page format                                      | standard · <a href="#">w/o parameter choice</a> · <a href="#">print view</a>                                                                                                                                                    |
| language                                         | <a href="#">German</a> · English                                                                                                                                                                                                |
| <a href="#">go to other block</a>                | U+0000 ... U+007F: Basic Latin                                                                                                                                                                                                  |
| code positions per page                          | <a href="#">128</a> · <a href="#">256</a> · 512 · <a href="#">1024</a>                                                                                                                                                          |
| display format for UTF-8 encoding                | hex. · <a href="#">decimal</a> · <a href="#">hex. (0x)</a> · <a href="#">octal</a> · <a href="#">binary</a> · <a href="#">for Perl string literals</a> · <a href="#">One Latin-1 char per byte</a> · <a href="#">no display</a> |
| Unicode character names                          | <a href="#">not displayed</a> · displayed · <a href="#">also display deprecated Unicode 1.0 names</a>                                                                                                                           |
| links for adding char to text                    | <a href="#">displayed</a> · not displayed                                                                                                                                                                                       |
| numerical HTML encoding of the Unicode character | not displayed · <a href="#">decimal</a> · <a href="#">hexadecimal</a>                                                                                                                                                           |
| HTML 4.0 character entities                      | <a href="#">displayed</a> · not displayed                                                                                                                                                                                       |

[Next page \(U+0200 ... U+03FF\) ⇒](#)

| Unicode code point | character | UTF-8 (hex.) | name      |
|--------------------|-----------|--------------|-----------|
| U+0000             |           | 00           | <control> |
| U+0001             |           | 01           | <control> |
| U+0002             |           | 02           | <control> |
| U+0003             |           | 03           | <control> |
| U+0004             |           | 04           | <control> |
| U+0005             |           | 05           | <control> |
| U+0006             |           | 06           | <control> |
| U+0007             |           | 07           | <control> |
| U+0008             |           | 08           | <control> |
| U+0009             |           | 09           | <control> |
| U+000A             |           | 0a           | <control> |
| U+000B             |           | 0b           | <control> |
| U+000C             |           | 0c           | <control> |
| U+000D             |           | 0d           | <control> |
| U+000E             |           | 0e           | <control> |

|        |    |    |                   |
|--------|----|----|-------------------|
| U+000F |    | 0f | <control>         |
| U+0010 |    | 10 | <control>         |
| U+0011 |    | 11 | <control>         |
| U+0012 |    | 12 | <control>         |
| U+0013 |    | 13 | <control>         |
| U+0014 |    | 14 | <control>         |
| U+0015 |    | 15 | <control>         |
| U+0016 |    | 16 | <control>         |
| U+0017 |    | 17 | <control>         |
| U+0018 |    | 18 | <control>         |
| U+0019 |    | 19 | <control>         |
| U+001A |    | 1a | <control>         |
| U+001B |    | 1b | <control>         |
| U+001C |    | 1c | <control>         |
| U+001D |    | 1d | <control>         |
| U+001E |    | 1e | <control>         |
| U+001F |    | 1f | <control>         |
| U+0020 |    | 20 | SPACE             |
| U+0021 | !  | 21 | EXCLAMATION MARK  |
| U+0022 | "  | 22 | QUOTATION MARK    |
| U+0023 | #  | 23 | NUMBER SIGN       |
| U+0024 | \$ | 24 | DOLLAR SIGN       |
| U+0025 | %  | 25 | PERCENT SIGN      |
| U+0026 | &  | 26 | AMPERSAND         |
| U+0027 | '  | 27 | APOSTROPHE        |
| U+0028 | (  | 28 | LEFT PARENTHESIS  |
| U+0029 | )  | 29 | RIGHT PARENTHESIS |
| U+002A | *  | 2a | ASTERISK          |
| U+002B | +  | 2b | PLUS SIGN         |
| U+002C | ,  | 2c | COMMA             |
| U+002D | -  | 2d | HYPHEN-MINUS      |
| U+002E | .  | 2e | FULL STOP         |
| U+002F | /  | 2f | SOLIDUS           |
| U+0030 | 0  | 30 | DIGIT ZERO        |
| U+0031 | 1  | 31 | DIGIT ONE         |
| U+0032 | 2  | 32 | DIGIT TWO         |
| U+0033 | 3  | 33 | DIGIT THREE       |
| U+0034 | 4  | 34 | DIGIT FOUR        |
| U+0035 | 5  | 35 | DIGIT FIVE        |
| U+0036 | 6  | 36 | DIGIT SIX         |
| U+0037 | 7  | 37 | DIGIT SEVEN       |
| U+0038 | 8  | 38 | DIGIT EIGHT       |
| U+0039 | 9  | 39 | DIGIT NINE        |
| U+003A | :  | 3a | COLON             |
| U+003B | ;  | 3b | SEMICOLON         |
| U+003C | <  | 3c | LESS-THAN SIGN    |
| U+003D | =  | 3d | EQUALS SIGN       |

|        |   |    |                        |
|--------|---|----|------------------------|
| U+003E | > | 3e | GREATER-THAN SIGN      |
| U+003F | ? | 3f | QUESTION MARK          |
| U+0040 | @ | 40 | COMMERCIAL AT          |
| U+0041 | A | 41 | LATIN CAPITAL LETTER A |
| U+0042 | B | 42 | LATIN CAPITAL LETTER B |
| U+0043 | C | 43 | LATIN CAPITAL LETTER C |
| U+0044 | D | 44 | LATIN CAPITAL LETTER D |
| U+0045 | E | 45 | LATIN CAPITAL LETTER E |
| U+0046 | F | 46 | LATIN CAPITAL LETTER F |
| U+0047 | G | 47 | LATIN CAPITAL LETTER G |
| U+0048 | H | 48 | LATIN CAPITAL LETTER H |
| U+0049 | I | 49 | LATIN CAPITAL LETTER I |
| U+004A | J | 4a | LATIN CAPITAL LETTER J |
| U+004B | K | 4b | LATIN CAPITAL LETTER K |
| U+004C | L | 4c | LATIN CAPITAL LETTER L |
| U+004D | M | 4d | LATIN CAPITAL LETTER M |
| U+004E | N | 4e | LATIN CAPITAL LETTER N |
| U+004F | O | 4f | LATIN CAPITAL LETTER O |
| U+0050 | P | 50 | LATIN CAPITAL LETTER P |
| U+0051 | Q | 51 | LATIN CAPITAL LETTER Q |
| U+0052 | R | 52 | LATIN CAPITAL LETTER R |
| U+0053 | S | 53 | LATIN CAPITAL LETTER S |
| U+0054 | T | 54 | LATIN CAPITAL LETTER T |
| U+0055 | U | 55 | LATIN CAPITAL LETTER U |
| U+0056 | V | 56 | LATIN CAPITAL LETTER V |
| U+0057 | W | 57 | LATIN CAPITAL LETTER W |
| U+0058 | X | 58 | LATIN CAPITAL LETTER X |
| U+0059 | Y | 59 | LATIN CAPITAL LETTER Y |
| U+005A | Z | 5a | LATIN CAPITAL LETTER Z |
| U+005B | [ | 5b | LEFT SQUARE BRACKET    |
| U+005C | \ | 5c | REVERSE SOLIDUS        |
| U+005D | ] | 5d | RIGHT SQUARE BRACKET   |
| U+005E | ^ | 5e | CIRCUMFLEX ACCENT      |
| U+005F | _ | 5f | LOW LINE               |
| U+0060 | ` | 60 | GRAVE ACCENT           |
| U+0061 | a | 61 | LATIN SMALL LETTER A   |
| U+0062 | b | 62 | LATIN SMALL LETTER B   |
| U+0063 | c | 63 | LATIN SMALL LETTER C   |
| U+0064 | d | 64 | LATIN SMALL LETTER D   |
| U+0065 | e | 65 | LATIN SMALL LETTER E   |
| U+0066 | f | 66 | LATIN SMALL LETTER F   |
| U+0067 | g | 67 | LATIN SMALL LETTER G   |
| U+0068 | h | 68 | LATIN SMALL LETTER H   |
| U+0069 | i | 69 | LATIN SMALL LETTER I   |
| U+006A | j | 6a | LATIN SMALL LETTER J   |
| U+006B | k | 6b | LATIN SMALL LETTER K   |
| U+006C | l | 6c | LATIN SMALL LETTER L   |

|        |   |       |                      |
|--------|---|-------|----------------------|
| U+006D | m | 6d    | LATIN SMALL LETTER M |
| U+006E | n | 6e    | LATIN SMALL LETTER N |
| U+006F | o | 6f    | LATIN SMALL LETTER O |
| U+0070 | p | 70    | LATIN SMALL LETTER P |
| U+0071 | q | 71    | LATIN SMALL LETTER Q |
| U+0072 | r | 72    | LATIN SMALL LETTER R |
| U+0073 | s | 73    | LATIN SMALL LETTER S |
| U+0074 | t | 74    | LATIN SMALL LETTER T |
| U+0075 | u | 75    | LATIN SMALL LETTER U |
| U+0076 | v | 76    | LATIN SMALL LETTER V |
| U+0077 | w | 77    | LATIN SMALL LETTER W |
| U+0078 | x | 78    | LATIN SMALL LETTER X |
| U+0079 | y | 79    | LATIN SMALL LETTER Y |
| U+007A | z | 7a    | LATIN SMALL LETTER Z |
| U+007B | { | 7b    | LEFT CURLY BRACKET   |
| U+007C |   | 7c    | VERTICAL LINE        |
| U+007D | } | 7d    | RIGHT CURLY BRACKET  |
| U+007E | ~ | 7e    | TILDE                |
| U+007F |   | 7f    | <control>            |
| U+0080 |   | c2 80 | <control>            |
| U+0081 |   | c2 81 | <control>            |
| U+0082 |   | c2 82 | <control>            |
| U+0083 |   | c2 83 | <control>            |
| U+0084 |   | c2 84 | <control>            |
| U+0085 |   | c2 85 | <control>            |
| U+0086 |   | c2 86 | <control>            |
| U+0087 |   | c2 87 | <control>            |
| U+0088 |   | c2 88 | <control>            |
| U+0089 |   | c2 89 | <control>            |
| U+008A |   | c2 8a | <control>            |
| U+008B |   | c2 8b | <control>            |
| U+008C |   | c2 8c | <control>            |
| U+008D |   | c2 8d | <control>            |
| U+008E |   | c2 8e | <control>            |
| U+008F |   | c2 8f | <control>            |
| U+0090 |   | c2 90 | <control>            |
| U+0091 |   | c2 91 | <control>            |
| U+0092 |   | c2 92 | <control>            |
| U+0093 |   | c2 93 | <control>            |
| U+0094 |   | c2 94 | <control>            |
| U+0095 |   | c2 95 | <control>            |
| U+0096 |   | c2 96 | <control>            |
| U+0097 |   | c2 97 | <control>            |
| U+0098 |   | c2 98 | <control>            |
| U+0099 |   | c2 99 | <control>            |
| U+009A |   | c2 9a | <control>            |
| U+009B |   | c2 9b | <control>            |

|        |   |       |                                            |
|--------|---|-------|--------------------------------------------|
| U+009C |   | c2 9c | <control>                                  |
| U+009D |   | c2 9d | <control>                                  |
| U+009E |   | c2 9e | <control>                                  |
| U+009F |   | c2 9f | <control>                                  |
| U+00A0 |   | c2 a0 | NO-BREAK SPACE                             |
| U+00A1 | ¡ | c2 a1 | INVERTED EXCLAMATION MARK                  |
| U+00A2 | ¢ | c2 a2 | CENT SIGN                                  |
| U+00A3 | £ | c2 a3 | POUND SIGN                                 |
| U+00A4 | ¤ | c2 a4 | CURRENCY SIGN                              |
| U+00A5 | ¥ | c2 a5 | YEN SIGN                                   |
| U+00A6 |   | c2 a6 | BROKEN BAR                                 |
| U+00A7 | § | c2 a7 | SECTION SIGN                               |
| U+00A8 | ¨ | c2 a8 | DIAERESIS                                  |
| U+00A9 | © | c2 a9 | COPYRIGHT SIGN                             |
| U+00AA | ª | c2 aa | FEMININE ORDINAL INDICATOR                 |
| U+00AB | « | c2 ab | LEFT-POINTING DOUBLE ANGLE QUOTATION MARK  |
| U+00AC | ¬ | c2 ac | NOT SIGN                                   |
| U+00AD |   | c2 ad | SOFT HYPHEN                                |
| U+00AE | ® | c2 ae | REGISTERED SIGN                            |
| U+00AF | — | c2 af | MACRON                                     |
| U+00B0 | ° | c2 b0 | DEGREE SIGN                                |
| U+00B1 | ± | c2 b1 | PLUS-MINUS SIGN                            |
| U+00B2 | ² | c2 b2 | SUPERSCRIFT TWO                            |
| U+00B3 | ³ | c2 b3 | SUPERSCRIFT THREE                          |
| U+00B4 | ´ | c2 b4 | ACUTE ACCENT                               |
| U+00B5 | µ | c2 b5 | MICRO SIGN                                 |
| U+00B6 | ¶ | c2 b6 | PILCROW SIGN                               |
| U+00B7 | · | c2 b7 | MIDDLE DOT                                 |
| U+00B8 | ¸ | c2 b8 | CEDILLA                                    |
| U+00B9 | ¹ | c2 b9 | SUPERSCRIFT ONE                            |
| U+00BA | º | c2 ba | MASCULINE ORDINAL INDICATOR                |
| U+00BB | » | c2 bb | RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK |
| U+00BC | ¼ | c2 bc | VULGAR FRACTION ONE QUARTER                |
| U+00BD | ½ | c2 bd | VULGAR FRACTION ONE HALF                   |
| U+00BE | ¾ | c2 be | VULGAR FRACTION THREE QUARTERS             |
| U+00BF | ¿ | c2 bf | INVERTED QUESTION MARK                     |
| U+00C0 | À | c3 80 | LATIN CAPITAL LETTER A WITH GRAVE          |
| U+00C1 | Á | c3 81 | LATIN CAPITAL LETTER A WITH ACUTE          |
| U+00C2 | Â | c3 82 | LATIN CAPITAL LETTER A WITH CIRCUMFLEX     |
| U+00C3 | Ã | c3 83 | LATIN CAPITAL LETTER A WITH TILDE          |
| U+00C4 | Ä | c3 84 | LATIN CAPITAL LETTER A WITH DIAERESIS      |
| U+00C5 | Å | c3 85 | LATIN CAPITAL LETTER A WITH RING ABOVE     |
| U+00C6 | Æ | c3 86 | LATIN CAPITAL LETTER AE                    |
| U+00C7 | Ç | c3 87 | LATIN CAPITAL LETTER C WITH CEDILLA        |
| U+00C8 | È | c3 88 | LATIN CAPITAL LETTER E WITH GRAVE          |
| U+00C9 | É | c3 89 | LATIN CAPITAL LETTER E WITH ACUTE          |
| U+00CA | Ê | c3 8a | LATIN CAPITAL LETTER E WITH CIRCUMFLEX     |

|        |   |       |                                        |
|--------|---|-------|----------------------------------------|
| U+00CB | Ë | c3 8b | LATIN CAPITAL LETTER E WITH DIAERESIS  |
| U+00CC | Ì | c3 8c | LATIN CAPITAL LETTER I WITH GRAVE      |
| U+00CD | Í | c3 8d | LATIN CAPITAL LETTER I WITH ACUTE      |
| U+00CE | Î | c3 8e | LATIN CAPITAL LETTER I WITH CIRCUMFLEX |
| U+00CF | Ï | c3 8f | LATIN CAPITAL LETTER I WITH DIAERESIS  |
| U+00D0 | Ð | c3 90 | LATIN CAPITAL LETTER ETH               |
| U+00D1 | Ñ | c3 91 | LATIN CAPITAL LETTER N WITH TILDE      |
| U+00D2 | Ò | c3 92 | LATIN CAPITAL LETTER O WITH GRAVE      |
| U+00D3 | Ó | c3 93 | LATIN CAPITAL LETTER O WITH ACUTE      |
| U+00D4 | Ô | c3 94 | LATIN CAPITAL LETTER O WITH CIRCUMFLEX |
| U+00D5 | Õ | c3 95 | LATIN CAPITAL LETTER O WITH TILDE      |
| U+00D6 | Ö | c3 96 | LATIN CAPITAL LETTER O WITH DIAERESIS  |
| U+00D7 | × | c3 97 | MULTIPLICATION SIGN                    |
| U+00D8 | Ø | c3 98 | LATIN CAPITAL LETTER O WITH STROKE     |
| U+00D9 | Ù | c3 99 | LATIN CAPITAL LETTER U WITH GRAVE      |
| U+00DA | Ú | c3 9a | LATIN CAPITAL LETTER U WITH ACUTE      |
| U+00DB | Û | c3 9b | LATIN CAPITAL LETTER U WITH CIRCUMFLEX |
| U+00DC | Ü | c3 9c | LATIN CAPITAL LETTER U WITH DIAERESIS  |
| U+00DD | Ý | c3 9d | LATIN CAPITAL LETTER Y WITH ACUTE      |
| U+00DE | Þ | c3 9e | LATIN CAPITAL LETTER THORN             |
| U+00DF | ß | c3 9f | LATIN SMALL LETTER SHARP S             |
| U+00E0 | à | c3 a0 | LATIN SMALL LETTER A WITH GRAVE        |
| U+00E1 | á | c3 a1 | LATIN SMALL LETTER A WITH ACUTE        |
| U+00E2 | â | c3 a2 | LATIN SMALL LETTER A WITH CIRCUMFLEX   |
| U+00E3 | ã | c3 a3 | LATIN SMALL LETTER A WITH TILDE        |
| U+00E4 | ä | c3 a4 | LATIN SMALL LETTER A WITH DIAERESIS    |
| U+00E5 | å | c3 a5 | LATIN SMALL LETTER A WITH RING ABOVE   |
| U+00E6 | æ | c3 a6 | LATIN SMALL LETTER AE                  |
| U+00E7 | ç | c3 a7 | LATIN SMALL LETTER C WITH CEDILLA      |
| U+00E8 | è | c3 a8 | LATIN SMALL LETTER E WITH GRAVE        |
| U+00E9 | é | c3 a9 | LATIN SMALL LETTER E WITH ACUTE        |
| U+00EA | ê | c3 aa | LATIN SMALL LETTER E WITH CIRCUMFLEX   |
| U+00EB | ë | c3 ab | LATIN SMALL LETTER E WITH DIAERESIS    |
| U+00EC | ì | c3 ac | LATIN SMALL LETTER I WITH GRAVE        |
| U+00ED | í | c3 ad | LATIN SMALL LETTER I WITH ACUTE        |
| U+00EE | î | c3 ae | LATIN SMALL LETTER I WITH CIRCUMFLEX   |
| U+00EF | ï | c3 af | LATIN SMALL LETTER I WITH DIAERESIS    |
| U+00F0 | ð | c3 b0 | LATIN SMALL LETTER ETH                 |
| U+00F1 | ñ | c3 b1 | LATIN SMALL LETTER N WITH TILDE        |
| U+00F2 | ò | c3 b2 | LATIN SMALL LETTER O WITH GRAVE        |
| U+00F3 | ó | c3 b3 | LATIN SMALL LETTER O WITH ACUTE        |
| U+00F4 | ô | c3 b4 | LATIN SMALL LETTER O WITH CIRCUMFLEX   |
| U+00F5 | õ | c3 b5 | LATIN SMALL LETTER O WITH TILDE        |
| U+00F6 | ö | c3 b6 | LATIN SMALL LETTER O WITH DIAERESIS    |
| U+00F7 | ÷ | c3 b7 | DIVISION SIGN                          |
| U+00F8 | ø | c3 b8 | LATIN SMALL LETTER O WITH STROKE       |
| U+00F9 | ù | c3 b9 | LATIN SMALL LETTER U WITH GRAVE        |

|        |   |       |                                        |
|--------|---|-------|----------------------------------------|
| U+00FA | ú | c3 ba | LATIN SMALL LETTER U WITH ACUTE        |
| U+00FB | û | c3 bb | LATIN SMALL LETTER U WITH CIRCUMFLEX   |
| U+00FC | ü | c3 bc | LATIN SMALL LETTER U WITH DIAERESIS    |
| U+00FD | ý | c3 bd | LATIN SMALL LETTER Y WITH ACUTE        |
| U+00FE | þ | c3 be | LATIN SMALL LETTER THORN               |
| U+00FF | ÿ | c3 bf | LATIN SMALL LETTER Y WITH DIAERESIS    |
| U+0100 | Ā | c4 80 | LATIN CAPITAL LETTER A WITH MACRON     |
| U+0101 | ā | c4 81 | LATIN SMALL LETTER A WITH MACRON       |
| U+0102 | Ă | c4 82 | LATIN CAPITAL LETTER A WITH BREVE      |
| U+0103 | ă | c4 83 | LATIN SMALL LETTER A WITH BREVE        |
| U+0104 | Ą | c4 84 | LATIN CAPITAL LETTER A WITH OGONEK     |
| U+0105 | ą | c4 85 | LATIN SMALL LETTER A WITH OGONEK       |
| U+0106 | Ć | c4 86 | LATIN CAPITAL LETTER C WITH ACUTE      |
| U+0107 | ć | c4 87 | LATIN SMALL LETTER C WITH ACUTE        |
| U+0108 | Ĉ | c4 88 | LATIN CAPITAL LETTER C WITH CIRCUMFLEX |
| U+0109 | ĉ | c4 89 | LATIN SMALL LETTER C WITH CIRCUMFLEX   |
| U+010A | Č | c4 8a | LATIN CAPITAL LETTER C WITH DOT ABOVE  |
| U+010B | č | c4 8b | LATIN SMALL LETTER C WITH DOT ABOVE    |
| U+010C | Ď | c4 8c | LATIN CAPITAL LETTER C WITH CARON      |
| U+010D | ď | c4 8d | LATIN SMALL LETTER C WITH CARON        |
| U+010E | Ď | c4 8e | LATIN CAPITAL LETTER D WITH CARON      |
| U+010F | ď | c4 8f | LATIN SMALL LETTER D WITH CARON        |
| U+0110 | Ð | c4 90 | LATIN CAPITAL LETTER D WITH STROKE     |
| U+0111 | ð | c4 91 | LATIN SMALL LETTER D WITH STROKE       |
| U+0112 | Ē | c4 92 | LATIN CAPITAL LETTER E WITH MACRON     |
| U+0113 | ē | c4 93 | LATIN SMALL LETTER E WITH MACRON       |
| U+0114 | Ĕ | c4 94 | LATIN CAPITAL LETTER E WITH BREVE      |
| U+0115 | ĕ | c4 95 | LATIN SMALL LETTER E WITH BREVE        |
| U+0116 | Ė | c4 96 | LATIN CAPITAL LETTER E WITH DOT ABOVE  |
| U+0117 | ė | c4 97 | LATIN SMALL LETTER E WITH DOT ABOVE    |
| U+0118 | Ę | c4 98 | LATIN CAPITAL LETTER E WITH OGONEK     |
| U+0119 | ę | c4 99 | LATIN SMALL LETTER E WITH OGONEK       |
| U+011A | Ě | c4 9a | LATIN CAPITAL LETTER E WITH CARON      |
| U+011B | ě | c4 9b | LATIN SMALL LETTER E WITH CARON        |
| U+011C | Ĝ | c4 9c | LATIN CAPITAL LETTER G WITH CIRCUMFLEX |
| U+011D | ĝ | c4 9d | LATIN SMALL LETTER G WITH CIRCUMFLEX   |
| U+011E | Ğ | c4 9e | LATIN CAPITAL LETTER G WITH BREVE      |
| U+011F | ğ | c4 9f | LATIN SMALL LETTER G WITH BREVE        |
| U+0120 | Ġ | c4 a0 | LATIN CAPITAL LETTER G WITH DOT ABOVE  |
| U+0121 | ġ | c4 a1 | LATIN SMALL LETTER G WITH DOT ABOVE    |
| U+0122 | Ģ | c4 a2 | LATIN CAPITAL LETTER G WITH CEDILLA    |
| U+0123 | ģ | c4 a3 | LATIN SMALL LETTER G WITH CEDILLA      |
| U+0124 | Ĥ | c4 a4 | LATIN CAPITAL LETTER H WITH CIRCUMFLEX |
| U+0125 | ĥ | c4 a5 | LATIN SMALL LETTER H WITH CIRCUMFLEX   |
| U+0126 | Ħ | c4 a6 | LATIN CAPITAL LETTER H WITH STROKE     |
| U+0127 | ħ | c4 a7 | LATIN SMALL LETTER H WITH STROKE       |
| U+0128 | Ĩ | c4 a8 | LATIN CAPITAL LETTER I WITH TILDE      |

|        |    |       |                                             |
|--------|----|-------|---------------------------------------------|
| U+0129 | ĩ  | c4 a9 | LATIN SMALL LETTER I WITH TILDE             |
| U+012A | Ī  | c4 aa | LATIN CAPITAL LETTER I WITH MACRON          |
| U+012B | ī  | c4 ab | LATIN SMALL LETTER I WITH MACRON            |
| U+012C | İ  | c4 ac | LATIN CAPITAL LETTER I WITH BREVE           |
| U+012D | ï  | c4 ad | LATIN SMALL LETTER I WITH BREVE             |
| U+012E | Į  | c4 ae | LATIN CAPITAL LETTER I WITH OGONEK          |
| U+012F | į  | c4 af | LATIN SMALL LETTER I WITH OGONEK            |
| U+0130 | İ̇ | c4 b0 | LATIN CAPITAL LETTER I WITH DOT ABOVE       |
| U+0131 | ı  | c4 b1 | LATIN SMALL LETTER DOTLESS I                |
| U+0132 | IJ | c4 b2 | LATIN CAPITAL LIGATURE IJ                   |
| U+0133 | ij | c4 b3 | LATIN SMALL LIGATURE IJ                     |
| U+0134 | Ĵ  | c4 b4 | LATIN CAPITAL LETTER J WITH CIRCUMFLEX      |
| U+0135 | ĵ  | c4 b5 | LATIN SMALL LETTER J WITH CIRCUMFLEX        |
| U+0136 | Ķ  | c4 b6 | LATIN CAPITAL LETTER K WITH CEDILLA         |
| U+0137 | ķ  | c4 b7 | LATIN SMALL LETTER K WITH CEDILLA           |
| U+0138 | κ  | c4 b8 | LATIN SMALL LETTER KRA                      |
| U+0139 | Ĺ  | c4 b9 | LATIN CAPITAL LETTER L WITH ACUTE           |
| U+013A | ĺ  | c4 ba | LATIN SMALL LETTER L WITH ACUTE             |
| U+013B | Ľ  | c4 bb | LATIN CAPITAL LETTER L WITH CEDILLA         |
| U+013C | ļ  | c4 bc | LATIN SMALL LETTER L WITH CEDILLA           |
| U+013D | Ľ  | c4 bd | LATIN CAPITAL LETTER L WITH CARON           |
| U+013E | ľ  | c4 be | LATIN SMALL LETTER L WITH CARON             |
| U+013F | Ł  | c4 bf | LATIN CAPITAL LETTER L WITH MIDDLE DOT      |
| U+0140 | ł  | c5 80 | LATIN SMALL LETTER L WITH MIDDLE DOT        |
| U+0141 | Ł̣ | c5 81 | LATIN CAPITAL LETTER L WITH STROKE          |
| U+0142 | ł̣ | c5 82 | LATIN SMALL LETTER L WITH STROKE            |
| U+0143 | Ń  | c5 83 | LATIN CAPITAL LETTER N WITH ACUTE           |
| U+0144 | ń  | c5 84 | LATIN SMALL LETTER N WITH ACUTE             |
| U+0145 | Ñ  | c5 85 | LATIN CAPITAL LETTER N WITH CEDILLA         |
| U+0146 | ñ  | c5 86 | LATIN SMALL LETTER N WITH CEDILLA           |
| U+0147 | Ṇ̃ | c5 87 | LATIN CAPITAL LETTER N WITH CARON           |
| U+0148 | ň  | c5 88 | LATIN SMALL LETTER N WITH CARON             |
| U+0149 | ṅ  | c5 89 | LATIN SMALL LETTER N PRECEDED BY APOSTROPHE |
| U+014A | Ŋ  | c5 8a | LATIN CAPITAL LETTER ENG                    |
| U+014B | ŋ  | c5 8b | LATIN SMALL LETTER ENG                      |
| U+014C | Ō  | c5 8c | LATIN CAPITAL LETTER O WITH MACRON          |
| U+014D | ō  | c5 8d | LATIN SMALL LETTER O WITH MACRON            |
| U+014E | Ö  | c5 8e | LATIN CAPITAL LETTER O WITH BREVE           |
| U+014F | ö  | c5 8f | LATIN SMALL LETTER O WITH BREVE             |
| U+0150 | Ő  | c5 90 | LATIN CAPITAL LETTER O WITH DOUBLE ACUTE    |
| U+0151 | ő  | c5 91 | LATIN SMALL LETTER O WITH DOUBLE ACUTE      |
| U+0152 | Œ  | c5 92 | LATIN CAPITAL LIGATURE OE                   |
| U+0153 | œ  | c5 93 | LATIN SMALL LIGATURE OE                     |
| U+0154 | Ŕ  | c5 94 | LATIN CAPITAL LETTER R WITH ACUTE           |
| U+0155 | ŕ  | c5 95 | LATIN SMALL LETTER R WITH ACUTE             |
| U+0156 | Ŗ  | c5 96 | LATIN CAPITAL LETTER R WITH CEDILLA         |
| U+0157 | ŗ  | c5 97 | LATIN SMALL LETTER R WITH CEDILLA           |

|        |       |       |                                          |
|--------|-------|-------|------------------------------------------|
| U+0158 | Ř     | c5 98 | LATIN CAPITAL LETTER R WITH CARON        |
| U+0159 | ř     | c5 99 | LATIN SMALL LETTER R WITH CARON          |
| U+015A | Ś     | c5 9a | LATIN CAPITAL LETTER S WITH ACUTE        |
| U+015B | ś     | c5 9b | LATIN SMALL LETTER S WITH ACUTE          |
| U+015C | Ŝ     | c5 9c | LATIN CAPITAL LETTER S WITH CIRCUMFLEX   |
| U+015D | ŝ     | c5 9d | LATIN SMALL LETTER S WITH CIRCUMFLEX     |
| U+015E | Ş     | c5 9e | LATIN CAPITAL LETTER S WITH CEDILLA      |
| U+015F | ş     | c5 9f | LATIN SMALL LETTER S WITH CEDILLA        |
| U+0160 | Š     | c5 a0 | LATIN CAPITAL LETTER S WITH CARON        |
| U+0161 | š     | c5 a1 | LATIN SMALL LETTER S WITH CARON          |
| U+0162 | Ț     | c5 a2 | LATIN CAPITAL LETTER T WITH CEDILLA      |
| U+0163 | ț     | c5 a3 | LATIN SMALL LETTER T WITH CEDILLA        |
| U+0164 | Ť     | c5 a4 | LATIN CAPITAL LETTER T WITH CARON        |
| U+0165 | ť     | c5 a5 | LATIN SMALL LETTER T WITH CARON          |
| U+0166 | Ʀ     | c5 a6 | LATIN CAPITAL LETTER T WITH STROKE       |
| U+0167 | ƥ     | c5 a7 | LATIN SMALL LETTER T WITH STROKE         |
| U+0168 | Ũ     | c5 a8 | LATIN CAPITAL LETTER U WITH TILDE        |
| U+0169 | ũ     | c5 a9 | LATIN SMALL LETTER U WITH TILDE          |
| U+016A | Ū     | c5 aa | LATIN CAPITAL LETTER U WITH MACRON       |
| U+016B | ū     | c5 ab | LATIN SMALL LETTER U WITH MACRON         |
| U+016C | Ů     | c5 ac | LATIN CAPITAL LETTER U WITH BREVE        |
| U+016D | ů     | c5 ad | LATIN SMALL LETTER U WITH BREVE          |
| U+016E | Ů̇    | c5 ae | LATIN CAPITAL LETTER U WITH RING ABOVE   |
| U+016F | ů̇    | c5 af | LATIN SMALL LETTER U WITH RING ABOVE     |
| U+0170 | Ű     | c5 b0 | LATIN CAPITAL LETTER U WITH DOUBLE ACUTE |
| U+0171 | ű     | c5 b1 | LATIN SMALL LETTER U WITH DOUBLE ACUTE   |
| U+0172 | Ų     | c5 b2 | LATIN CAPITAL LETTER U WITH OGONEK       |
| U+0173 | ų     | c5 b3 | LATIN SMALL LETTER U WITH OGONEK         |
| U+0174 | Ŵ     | c5 b4 | LATIN CAPITAL LETTER W WITH CIRCUMFLEX   |
| U+0175 | ŵ     | c5 b5 | LATIN SMALL LETTER W WITH CIRCUMFLEX     |
| U+0176 | Ŷ     | c5 b6 | LATIN CAPITAL LETTER Y WITH CIRCUMFLEX   |
| U+0177 | ŷ     | c5 b7 | LATIN SMALL LETTER Y WITH CIRCUMFLEX     |
| U+0178 | ÿ     | c5 b8 | LATIN CAPITAL LETTER Y WITH DIAERESIS    |
| U+0179 | Ž     | c5 b9 | LATIN CAPITAL LETTER Z WITH ACUTE        |
| U+017A | ž     | c5 ba | LATIN SMALL LETTER Z WITH ACUTE          |
| U+017B | Ž̇    | c5 bb | LATIN CAPITAL LETTER Z WITH DOT ABOVE    |
| U+017C | ž̇    | c5 bc | LATIN SMALL LETTER Z WITH DOT ABOVE      |
| U+017D | Ẓ̌    | c5 bd | LATIN CAPITAL LETTER Z WITH CARON        |
| U+017E | ẓ̌    | c5 be | LATIN SMALL LETTER Z WITH CARON          |
| U+017F | ƒ     | c5 bf | LATIN SMALL LETTER LONG S                |
| U+0180 | ƒ̣    | c6 80 | LATIN SMALL LETTER B WITH STROKE         |
| U+0181 | Ɓ     | c6 81 | LATIN CAPITAL LETTER B WITH HOOK         |
| U+0182 | Ɓ̣    | c6 82 | LATIN CAPITAL LETTER B WITH TOPBAR       |
| U+0183 | Ɓ̣̇   | c6 83 | LATIN SMALL LETTER B WITH TOPBAR         |
| U+0184 | Ɓ̣̣̇  | c6 84 | LATIN CAPITAL LETTER TONE SIX            |
| U+0185 | Ɓ̣̣̇̇ | c6 85 | LATIN SMALL LETTER TONE SIX              |
| U+0186 | Ɔ     | c6 86 | LATIN CAPITAL LETTER OPEN O              |

|        |    |       |                                            |
|--------|----|-------|--------------------------------------------|
| U+0187 | Ć  | c6 87 | LATIN CAPITAL LETTER C WITH HOOK           |
| U+0188 | ć  | c6 88 | LATIN SMALL LETTER C WITH HOOK             |
| U+0189 | Đ  | c6 89 | LATIN CAPITAL LETTER AFRICAN D             |
| U+018A | Ď  | c6 8a | LATIN CAPITAL LETTER D WITH HOOK           |
| U+018B | ď  | c6 8b | LATIN CAPITAL LETTER D WITH TOPBAR         |
| U+018C | đ  | c6 8c | LATIN SMALL LETTER D WITH TOPBAR           |
| U+018D | g  | c6 8d | LATIN SMALL LETTER TURNED DELTA            |
| U+018E | Ǝ  | c6 8e | LATIN CAPITAL LETTER REVERSED E            |
| U+018F | Ə  | c6 8f | LATIN CAPITAL LETTER SCHWA                 |
| U+0190 | Ɛ  | c6 90 | LATIN CAPITAL LETTER OPEN E                |
| U+0191 | Ƒ  | c6 91 | LATIN CAPITAL LETTER F WITH HOOK           |
| U+0192 | ƒ  | c6 92 | LATIN SMALL LETTER F WITH HOOK             |
| U+0193 | Ġ  | c6 93 | LATIN CAPITAL LETTER G WITH HOOK           |
| U+0194 | Ƴ  | c6 94 | LATIN CAPITAL LETTER GAMMA                 |
| U+0195 | hʋ | c6 95 | LATIN SMALL LETTER HV                      |
| U+0196 | ɪ  | c6 96 | LATIN CAPITAL LETTER IOTA                  |
| U+0197 | ɪ̇ | c6 97 | LATIN CAPITAL LETTER I WITH STROKE         |
| U+0198 | Ƙ  | c6 98 | LATIN CAPITAL LETTER K WITH HOOK           |
| U+0199 | ƙ  | c6 99 | LATIN SMALL LETTER K WITH HOOK             |
| U+019A | ɬ  | c6 9a | LATIN SMALL LETTER L WITH BAR              |
| U+019B | λ̣ | c6 9b | LATIN SMALL LETTER LAMBDA WITH STROKE      |
| U+019C | ℳ  | c6 9c | LATIN CAPITAL LETTER TURNED M              |
| U+019D | ɱ  | c6 9d | LATIN CAPITAL LETTER N WITH LEFT HOOK      |
| U+019E | ɳ  | c6 9e | LATIN SMALL LETTER N WITH LONG RIGHT LEG   |
| U+019F | Ɔ  | c6 9f | LATIN CAPITAL LETTER O WITH MIDDLE TILDE   |
| U+01A0 | Ȫ  | c6 a0 | LATIN CAPITAL LETTER O WITH HORN           |
| U+01A1 | ȫ  | c6 a1 | LATIN SMALL LETTER O WITH HORN             |
| U+01A2 | Ɔɹ | c6 a2 | LATIN CAPITAL LETTER OI                    |
| U+01A3 | ɹɹ | c6 a3 | LATIN SMALL LETTER OI                      |
| U+01A4 | Ɔ  | c6 a4 | LATIN CAPITAL LETTER P WITH HOOK           |
| U+01A5 | Ɔ  | c6 a5 | LATIN SMALL LETTER P WITH HOOK             |
| U+01A6 | Ɔ  | c6 a6 | LATIN LETTER YR                            |
| U+01A7 | Ɔ  | c6 a7 | LATIN CAPITAL LETTER TONE TWO              |
| U+01A8 | Ɔ  | c6 a8 | LATIN SMALL LETTER TONE TWO                |
| U+01A9 | Σ  | c6 a9 | LATIN CAPITAL LETTER ESH                   |
| U+01AA | ɹ  | c6 aa | LATIN LETTER REVERSED ESH LOOP             |
| U+01AB | ɹ  | c6 ab | LATIN SMALL LETTER T WITH PALATAL HOOK     |
| U+01AC | Ɔ  | c6 ac | LATIN CAPITAL LETTER T WITH HOOK           |
| U+01AD | Ɔ  | c6 ad | LATIN SMALL LETTER T WITH HOOK             |
| U+01AE | Ɔ  | c6 ae | LATIN CAPITAL LETTER T WITH RETROFLEX HOOK |
| U+01AF | Ɔ  | c6 af | LATIN CAPITAL LETTER U WITH HORN           |
| U+01B0 | ɹ  | c6 b0 | LATIN SMALL LETTER U WITH HORN             |
| U+01B1 | Ɔ  | c6 b1 | LATIN CAPITAL LETTER UPSILON               |
| U+01B2 | Ɔ  | c6 b2 | LATIN CAPITAL LETTER V WITH HOOK           |
| U+01B3 | Ɔ  | c6 b3 | LATIN CAPITAL LETTER Y WITH HOOK           |
| U+01B4 | Ɔ  | c6 b4 | LATIN SMALL LETTER Y WITH HOOK             |
| U+01B5 | Ɔ  | c6 b5 | LATIN CAPITAL LETTER Z WITH STROKE         |

|        |    |       |                                                       |
|--------|----|-------|-------------------------------------------------------|
| U+01B6 | z  | c6 b6 | LATIN SMALL LETTER Z WITH STROKE                      |
| U+01B7 | Ƶ  | c6 b7 | LATIN CAPITAL LETTER EZH                              |
| U+01B8 | Ʒ  | c6 b8 | LATIN CAPITAL LETTER EZH REVERSED                     |
| U+01B9 | Ʒ  | c6 b9 | LATIN SMALL LETTER EZH REVERSED                       |
| U+01BA | Ʒ  | c6 ba | LATIN SMALL LETTER EZH WITH TAIL                      |
| U+01BB | 2  | c6 bb | LATIN LETTER TWO WITH STROKE                          |
| U+01BC | 5  | c6 bc | LATIN CAPITAL LETTER TONE FIVE                        |
| U+01BD | 5  | c6 bd | LATIN SMALL LETTER TONE FIVE                          |
| U+01BE | ɀ  | c6 be | LATIN LETTER INVERTED GLOTTAL STOP WITH STROKE        |
| U+01BF | p  | c6 bf | LATIN LETTER WYNN                                     |
| U+01C0 |    | c7 80 | LATIN LETTER DENTAL CLICK                             |
| U+01C1 |    | c7 81 | LATIN LETTER LATERAL CLICK                            |
| U+01C2 | ‡  | c7 82 | LATIN LETTER ALVEOLAR CLICK                           |
| U+01C3 | !  | c7 83 | LATIN LETTER RETROFLEX CLICK                          |
| U+01C4 | DŽ | c7 84 | LATIN CAPITAL LETTER DZ WITH CARON                    |
| U+01C5 | Dž | c7 85 | LATIN CAPITAL LETTER D WITH SMALL LETTER Z WITH CARON |
| U+01C6 | dž | c7 86 | LATIN SMALL LETTER DZ WITH CARON                      |
| U+01C7 | LJ | c7 87 | LATIN CAPITAL LETTER LJ                               |
| U+01C8 | Lj | c7 88 | LATIN CAPITAL LETTER L WITH SMALL LETTER J            |
| U+01C9 | lj | c7 89 | LATIN SMALL LETTER LJ                                 |
| U+01CA | NJ | c7 8a | LATIN CAPITAL LETTER NJ                               |
| U+01CB | Nj | c7 8b | LATIN CAPITAL LETTER N WITH SMALL LETTER J            |
| U+01CC | nj | c7 8c | LATIN SMALL LETTER NJ                                 |
| U+01CD | Ā  | c7 8d | LATIN CAPITAL LETTER A WITH CARON                     |
| U+01CE | ā  | c7 8e | LATIN SMALL LETTER A WITH CARON                       |
| U+01CF | Ī  | c7 8f | LATIN CAPITAL LETTER I WITH CARON                     |
| U+01D0 | ī  | c7 90 | LATIN SMALL LETTER I WITH CARON                       |
| U+01D1 | Ŏ  | c7 91 | LATIN CAPITAL LETTER O WITH CARON                     |
| U+01D2 | ō  | c7 92 | LATIN SMALL LETTER O WITH CARON                       |
| U+01D3 | Ů  | c7 93 | LATIN CAPITAL LETTER U WITH CARON                     |
| U+01D4 | ů  | c7 94 | LATIN SMALL LETTER U WITH CARON                       |
| U+01D5 | Ű  | c7 95 | LATIN CAPITAL LETTER U WITH DIAERESIS AND MACRON      |
| U+01D6 | ű  | c7 96 | LATIN SMALL LETTER U WITH DIAERESIS AND MACRON        |
| U+01D7 | Ű  | c7 97 | LATIN CAPITAL LETTER U WITH DIAERESIS AND ACUTE       |
| U+01D8 | ű  | c7 98 | LATIN SMALL LETTER U WITH DIAERESIS AND ACUTE         |
| U+01D9 | Ű  | c7 99 | LATIN CAPITAL LETTER U WITH DIAERESIS AND CARON       |
| U+01DA | ű  | c7 9a | LATIN SMALL LETTER U WITH DIAERESIS AND CARON         |
| U+01DB | Ű  | c7 9b | LATIN CAPITAL LETTER U WITH DIAERESIS AND GRAVE       |
| U+01DC | ű  | c7 9c | LATIN SMALL LETTER U WITH DIAERESIS AND GRAVE         |
| U+01DD | ə  | c7 9d | LATIN SMALL LETTER TURNED E                           |
| U+01DE | Ā  | c7 9e | LATIN CAPITAL LETTER A WITH DIAERESIS AND MACRON      |
| U+01DF | ā  | c7 9f | LATIN SMALL LETTER A WITH DIAERESIS AND MACRON        |
| U+01E0 | Ā  | c7 a0 | LATIN CAPITAL LETTER A WITH DOT ABOVE AND MACRON      |

|        |    |       |                                                  |
|--------|----|-------|--------------------------------------------------|
| U+01E1 | ā  | c7 a1 | LATIN SMALL LETTER A WITH DOT ABOVE AND MACRON   |
| U+01E2 | Ā  | c7 a2 | LATIN CAPITAL LETTER AE WITH MACRON              |
| U+01E3 | æ  | c7 a3 | LATIN SMALL LETTER AE WITH MACRON                |
| U+01E4 | G  | c7 a4 | LATIN CAPITAL LETTER G WITH STROKE               |
| U+01E5 | g  | c7 a5 | LATIN SMALL LETTER G WITH STROKE                 |
| U+01E6 | Ġ  | c7 a6 | LATIN CAPITAL LETTER G WITH CARON                |
| U+01E7 | ġ  | c7 a7 | LATIN SMALL LETTER G WITH CARON                  |
| U+01E8 | Ķ  | c7 a8 | LATIN CAPITAL LETTER K WITH CARON                |
| U+01E9 | ķ  | c7 a9 | LATIN SMALL LETTER K WITH CARON                  |
| U+01EA | Q  | c7 aa | LATIN CAPITAL LETTER O WITH OGONEK               |
| U+01EB | q  | c7 ab | LATIN SMALL LETTER O WITH OGONEK                 |
| U+01EC | Ū  | c7 ac | LATIN CAPITAL LETTER O WITH OGONEK AND MACRON    |
| U+01ED | ū  | c7 ad | LATIN SMALL LETTER O WITH OGONEK AND MACRON      |
| U+01EE | Ž  | c7 ae | LATIN CAPITAL LETTER EZH WITH CARON              |
| U+01EF | ž  | c7 af | LATIN SMALL LETTER EZH WITH CARON                |
| U+01F0 | ĵ  | c7 b0 | LATIN SMALL LETTER J WITH CARON                  |
| U+01F1 | DZ | c7 b1 | LATIN CAPITAL LETTER DZ                          |
| U+01F2 | Dz | c7 b2 | LATIN CAPITAL LETTER D WITH SMALL LETTER Z       |
| U+01F3 | dz | c7 b3 | LATIN SMALL LETTER DZ                            |
| U+01F4 | Ĝ  | c7 b4 | LATIN CAPITAL LETTER G WITH ACUTE                |
| U+01F5 | ĝ  | c7 b5 | LATIN SMALL LETTER G WITH ACUTE                  |
| U+01F6 | Hu | c7 b6 | LATIN CAPITAL LETTER HWAIR                       |
| U+01F7 | ƿ  | c7 b7 | LATIN CAPITAL LETTER WYNN                        |
| U+01F8 | Ñ  | c7 b8 | LATIN CAPITAL LETTER N WITH GRAVE                |
| U+01F9 | ñ  | c7 b9 | LATIN SMALL LETTER N WITH GRAVE                  |
| U+01FA | Å  | c7 ba | LATIN CAPITAL LETTER A WITH RING ABOVE AND ACUTE |
| U+01FB | å  | c7 bb | LATIN SMALL LETTER A WITH RING ABOVE AND ACUTE   |
| U+01FC | Ė  | c7 bc | LATIN CAPITAL LETTER AE WITH ACUTE               |
| U+01FD | ė  | c7 bd | LATIN SMALL LETTER AE WITH ACUTE                 |
| U+01FE | Ų  | c7 be | LATIN CAPITAL LETTER O WITH STROKE AND ACUTE     |
| U+01FF | ų  | c7 bf | LATIN SMALL LETTER O WITH STROKE AND ACUTE       |