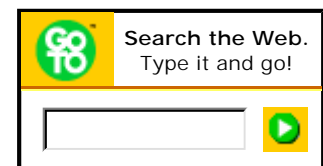


ASCII stands for American Standard Code for Information Interchange. ASCII was developed a long time ago and now the characters are not always used in the same way on some machines. Below is the ASCII character table and this includes descriptions of the first 32 characters. ASCII was designed for use with teletypes and so the descriptions are somewhat obscure and their use is frequently not as intended.

## ASCII Table

| Dec | Hx | Oct | Char                        | Dec | Hx | Oct | Char  | Dec | Hx | Oct | Char | Dec | Hx | Oct |
|-----|----|-----|-----------------------------|-----|----|-----|-------|-----|----|-----|------|-----|----|-----|
| 0   | 0  | 000 | NUL (null)                  | 32  | 20 | 040 | SPACE | 64  | 40 | 100 | @    | 96  | 60 | 140 |
| 1   | 1  | 001 | SOH (start of heading)      | 33  | 21 | 041 | !     | 65  | 41 | 101 | A    | 97  | 61 | 141 |
| 2   | 2  | 002 | STX (start of text)         | 34  | 22 | 042 | "     | 66  | 42 | 102 | B    | 98  | 62 | 142 |
| 3   | 3  | 003 | ETX (end of text)           | 35  | 23 | 043 | #     | 67  | 43 | 103 | C    | 99  | 63 | 143 |
| 4   | 4  | 004 | EOT (end of transmission)   | 36  | 24 | 044 | \$    | 68  | 44 | 104 | D    | 100 | 64 | 144 |
| 5   | 5  | 005 | ENQ (enquiry)               | 37  | 25 | 045 | %     | 69  | 45 | 105 | E    | 101 | 65 | 145 |
| 6   | 6  | 006 | ACK (acknowledge)           | 38  | 26 | 046 | &     | 70  | 46 | 106 | F    | 102 | 66 | 146 |
| 7   | 7  | 007 | BEL (bell)                  | 39  | 27 | 047 | '     | 71  | 47 | 107 | G    | 103 | 67 | 147 |
| 8   | 8  | 010 | BS (backspace)              | 40  | 28 | 050 | (     | 72  | 48 | 110 | H    | 104 | 68 | 150 |
| 9   | 9  | 011 | TAB (horizontal tab)        | 41  | 29 | 051 | )     | 73  | 49 | 111 | I    | 105 | 69 | 151 |
| 10  | A  | 012 | LF (NL line feed, new line) | 42  | 2A | 052 | *     | 74  | 4A | 112 | J    | 106 | 6A | 152 |
| 11  | B  | 013 | VT (vertical tab)           | 43  | 2B | 053 | +     | 75  | 4B | 113 | K    | 107 | 6B | 153 |
| 12  | C  | 014 | FF (NP form feed, new page) | 44  | 2C | 054 | ,     | 76  | 4C | 114 | L    | 108 | 6C | 154 |
| 13  | D  | 015 | CR (carriage return)        | 45  | 2D | 055 | -     | 77  | 4D | 115 | M    | 109 | 6D | 155 |
| 14  | E  | 016 | SO (shift out)              | 46  | 2E | 056 | .     | 78  | 4E | 116 | N    | 110 | 6E | 156 |
| 15  | F  | 017 | SI (shift in)               | 47  | 2F | 057 | /     | 79  | 4F | 117 | O    | 111 | 6F | 157 |
| 16  | 10 | 020 | DLE (data link escape)      | 48  | 30 | 060 | 0     | 80  | 50 | 120 | P    | 112 | 70 | 160 |
| 17  | 11 | 021 | DC1 (device control 1)      | 49  | 31 | 061 | 1     | 81  | 51 | 121 | Q    | 113 | 71 | 161 |
| 18  | 12 | 022 | DC2 (device control 2)      | 50  | 32 | 062 | 2     | 82  | 52 | 122 | R    | 114 | 72 | 162 |
| 19  | 13 | 023 | DC3 (device control 3)      | 51  | 33 | 063 | 3     | 83  | 53 | 123 | S    | 115 | 73 | 163 |
| 20  | 14 | 024 | DC4 (device control 4)      | 52  | 34 | 064 | 4     | 84  | 54 | 124 | T    | 116 | 74 | 164 |
| 21  | 15 | 025 | NAK (negative acknowledge)  | 53  | 35 | 065 | 5     | 85  | 55 | 125 | U    | 117 | 75 | 165 |
| 22  | 16 | 026 | SYN (synchronous idle)      | 54  | 36 | 066 | 6     | 86  | 56 | 126 | V    | 118 | 76 | 166 |
| 23  | 17 | 027 | ETB (end of trans. block)   | 55  | 37 | 067 | 7     | 87  | 57 | 127 | W    | 119 | 77 | 167 |
| 24  | 18 | 030 | CAN (cancel)                | 56  | 38 | 070 | 8     | 88  | 58 | 130 | X    | 120 | 78 | 170 |
| 25  | 19 | 031 | EM (end of medium)          | 57  | 39 | 071 | 9     | 89  | 59 | 131 | Y    | 121 | 79 | 171 |
| 26  | 1A | 032 | SUB (substitute)            | 58  | 3A | 072 | :     | 90  | 5A | 132 | Z    | 122 | 7A | 172 |
| 27  | 1B | 033 | ESC (escape)                | 59  | 3B | 073 | ;     | 91  | 5B | 133 | [    | 123 | 7B | 173 |
| 28  | 1C | 034 | FS (file separator)         | 60  | 3C | 074 | <     | 92  | 5C | 134 | \    | 124 | 7C | 174 |
| 29  | 1D | 035 | GS (group separator)        | 61  | 3D | 075 | =     | 93  | 5D | 135 | ]    | 125 | 7D | 175 |
| 30  | 1E | 036 | RS (record separator)       | 62  | 3E | 076 | >     | 94  | 5E | 136 | ^    | 126 | 7E | 176 |
| 31  | 1F | 037 | US (unit separator)         | 63  | 3F | 077 | ?     | 95  | 5F | 137 | _    | 127 | 7F | 177 |

### Extended Ascii Codes



These were added later and are not true ascii.  
There are different extended sets, but this is the most common.

|     |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |
|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|
| 128 | Ç | 144 | É | 160 | á | 176 | ▒ | 193 | ⊥ | 209 | ⌘ | 225 | β | 241 | ± |
| 129 | ù | 145 | æ | 161 | í | 177 | ▓ | 194 | ⌞ | 210 | ⌠ | 226 | Γ | 242 | ≥ |
| 130 | é | 146 | Æ | 162 | ó | 178 | █ | 195 | ⌟ | 211 | ⌡ | 227 | π | 243 | ≤ |
| 131 | â | 147 | ô | 163 | ú | 179 |   | 196 | — | 212 | ⌢ | 228 | Σ | 244 | ∫ |
| 132 | ä | 148 | ö | 164 | ñ | 180 | ⌈ | 197 | ⊕ | 213 | ⌣ | 229 | σ | 245 | ∫ |
| 133 | à | 149 | ò | 165 | Ñ | 181 | ⌉ | 198 | ⊖ | 214 | ⌤ | 230 | μ | 246 | + |
| 134 | â | 150 | û | 166 | ª | 182 | ⌊ | 199 | ⊗ | 215 | ⌥ | 231 | τ | 247 | ≈ |
| 135 | ç | 151 | ù | 167 | º | 183 | ⌋ | 200 | ⊘ | 216 | ⌦ | 232 | Φ | 248 | ° |
| 136 | ê | 152 | _ | 168 | ¿ | 184 | ⌌ | 201 | ⊙ | 217 | ⌧ | 233 | ⊖ | 249 | . |
| 137 | ë | 153 | Ö | 169 | _ | 185 | ⌍ | 202 | ⊚ | 218 | ⌨ | 234 | Ω | 250 | . |
| 138 | è | 154 | Û | 170 | ¬ | 186 | ⌎ | 203 | ⊛ | 219 | ■ | 235 | δ | 251 | √ |
| 139 | ï | 156 | £ | 171 | ½ | 187 | ⌏ | 204 | ⊜ | 220 | ■ | 236 | ∞ | 252 | _ |
| 140 | î | 157 | ¥ | 172 | ¼ | 188 | ⌐ | 205 | = | 221 | ■ | 237 | φ | 253 | ² |
| 141 | ì | 158 | _ | 173 | ¡ | 189 | ⌑ | 206 | ≠ | 222 | ■ | 238 | ε | 254 | ■ |
| 142 | Ä | 159 | f | 174 | « | 190 | ⌒ | 207 | ⊥ | 223 | ■ | 239 | ∧ | 255 |   |
| 143 | Å | 192 | ℓ | 175 | » | 191 | ⌓ | 208 | ⊦ | 224 | α | 240 | ≡ |     |   |