



## Rocky Enterprise Linux 9.2 Manual Pages on command 'ascii.7'

### \$ man ascii.7

ASCII(7) Linux Programmer's Manual ASCII(7)

#### NAME

ascii - ASCII character set encoded in octal, decimal, and hexadecimal

#### DESCRIPTION

ASCII is the American Standard Code for Information Interchange. It is a 7-bit code. Many 8-bit codes (e.g., ISO 8859-1) contain ASCII as their lower half. The international counterpart of ASCII is known as ISO 646-IRV.

The following table contains the 128 ASCII characters.

C program '\X' escapes are noted.

| Oct | Dec | Hex | Char | Oct | Dec | Hex | Char |
|-----|-----|-----|------|-----|-----|-----|------|
|-----|-----|-----|------|-----|-----|-----|------|

????????????????????????????????????????????????????????????????????????????????????

|     |   |    |                           |     |    |    |   |
|-----|---|----|---------------------------|-----|----|----|---|
| 000 | 0 | 00 | NUL '\0' (null character) | 100 | 64 | 40 | @ |
| 001 | 1 | 01 | SOH (start of heading)    | 101 | 65 | 41 | A |
| 002 | 2 | 02 | STX (start of text)       | 102 | 66 | 42 | B |
| 003 | 3 | 03 | ETX (end of text)         | 103 | 67 | 43 | C |
| 004 | 4 | 04 | EOT (end of transmission) | 104 | 68 | 44 | D |
| 005 | 5 | 05 | ENQ (enquiry)             | 105 | 69 | 45 | E |

|     |    |    |                          |     |     |    |       |
|-----|----|----|--------------------------|-----|-----|----|-------|
| 006 | 6  | 06 | ACK (acknowledge)        | 106 | 70  | 46 | F     |
| 007 | 7  | 07 | BEL '\a' (bell)          | 107 | 71  | 47 | G     |
| 010 | 8  | 08 | BS '\b' (backspace)      | 110 | 72  | 48 | H     |
| 011 | 9  | 09 | HT '\t' (horizontal tab) | 111 | 73  | 49 | I     |
| 012 | 10 | 0A | LF '\n' (new line)       | 112 | 74  | 4A | J     |
| 013 | 11 | 0B | VT '\v' (vertical tab)   | 113 | 75  | 4B | K     |
| 014 | 12 | 0C | FF '\f' (form feed)      | 114 | 76  | 4C | L     |
| 015 | 13 | 0D | CR '\r' (carriage ret)   | 115 | 77  | 4D | M     |
| 016 | 14 | 0E | SO (shift out)           | 116 | 78  | 4E | N     |
| 017 | 15 | 0F | SI (shift in)            | 117 | 79  | 4F | O     |
| 020 | 16 | 10 | DLE (data link escape)   | 120 | 80  | 50 | P     |
| 021 | 17 | 11 | DC1 (device control 1)   | 121 | 81  | 51 | Q     |
| 022 | 18 | 12 | DC2 (device control 2)   | 122 | 82  | 52 | R     |
| 023 | 19 | 13 | DC3 (device control 3)   | 123 | 83  | 53 | S     |
| 024 | 20 | 14 | DC4 (device control 4)   | 124 | 84  | 54 | T     |
| 025 | 21 | 15 | NAK (negative ack.)      | 125 | 85  | 55 | U     |
| 026 | 22 | 16 | SYN (synchronous idle)   | 126 | 86  | 56 | V     |
| 027 | 23 | 17 | ETB (end of trans. blk)  | 127 | 87  | 57 | W     |
| 030 | 24 | 18 | CAN (cancel)             | 130 | 88  | 58 | X     |
| 031 | 25 | 19 | EM (end of medium)       | 131 | 89  | 59 | Y     |
| 032 | 26 | 1A | SUB (substitute)         | 132 | 90  | 5A | Z     |
| 033 | 27 | 1B | ESC (escape)             | 133 | 91  | 5B | [     |
| 034 | 28 | 1C | FS (file separator)      | 134 | 92  | 5C | \ '\' |
| 035 | 29 | 1D | GS (group separator)     | 135 | 93  | 5D | ]     |
| 036 | 30 | 1E | RS (record separator)    | 136 | 94  | 5E | ^     |
| 037 | 31 | 1F | US (unit separator)      | 137 | 95  | 5F | _     |
| 040 | 32 | 20 | SPACE                    | 140 | 96  | 60 | `     |
| 041 | 33 | 21 | !                        | 141 | 97  | 61 | a     |
| 042 | 34 | 22 | "                        | 142 | 98  | 62 | b     |
| 043 | 35 | 23 | #                        | 143 | 99  | 63 | c     |
| 044 | 36 | 24 | \$                       | 144 | 100 | 64 | d     |
| 045 | 37 | 25 | %                        | 145 | 101 | 65 | e     |
| 046 | 38 | 26 | &                        | 146 | 102 | 66 | f     |

|     |    |    |   |     |     |    |     |
|-----|----|----|---|-----|-----|----|-----|
| 047 | 39 | 27 | ' | 147 | 103 | 67 | g   |
| 050 | 40 | 28 | ( | 150 | 104 | 68 | h   |
| 051 | 41 | 29 | ) | 151 | 105 | 69 | i   |
| 052 | 42 | 2A | * | 152 | 106 | 6A | j   |
| 053 | 43 | 2B | + | 153 | 107 | 6B | k   |
| 054 | 44 | 2C | , | 154 | 108 | 6C | l   |
| 055 | 45 | 2D | - | 155 | 109 | 6D | m   |
| 056 | 46 | 2E | . | 156 | 110 | 6E | n   |
| 057 | 47 | 2F | / | 157 | 111 | 6F | o   |
| 060 | 48 | 30 | 0 | 160 | 112 | 70 | p   |
| 061 | 49 | 31 | 1 | 161 | 113 | 71 | q   |
| 062 | 50 | 32 | 2 | 162 | 114 | 72 | r   |
| 063 | 51 | 33 | 3 | 163 | 115 | 73 | s   |
| 064 | 52 | 34 | 4 | 164 | 116 | 74 | t   |
| 065 | 53 | 35 | 5 | 165 | 117 | 75 | u   |
| 066 | 54 | 36 | 6 | 166 | 118 | 76 | v   |
| 067 | 55 | 37 | 7 | 167 | 119 | 77 | w   |
| 070 | 56 | 38 | 8 | 170 | 120 | 78 | x   |
| 071 | 57 | 39 | 9 | 171 | 121 | 79 | y   |
| 072 | 58 | 3A | : | 172 | 122 | 7A | z   |
| 073 | 59 | 3B | ; | 173 | 123 | 7B | {   |
| 074 | 60 | 3C | < | 174 | 124 | 7C |     |
| 075 | 61 | 3D | = | 175 | 125 | 7D | }   |
| 076 | 62 | 3E | > | 176 | 126 | 7E | ~   |
| 077 | 63 | 3F | ? | 177 | 127 | 7F | DEL |

## Tables

For convenience, below are more compact tables in hex and decimal.

2 3 4 5 6 7      30 40 50 60 70 80 90 100 110 120

-----

0: 0 @ P ` p    0: ( 2 < F P Z d n x

1: ! 1 A Q a q    1: ) 3 = G Q [ e o y

2: " 2 B R b r    2: \* 4 > H R \ f p z

3: # 3 C S c s    3: ! + 5 ? I S ] g q {

```

4: $ 4 D T d t   4: " , 6 @ J T ^ h r |
5: % 5 E U e u   5: # - 7 A K U _ i s }
6: & 6 F V f v   6: $ . 8 B L V ` j t ~
7: ' 7 G W g w   7: % / 9 C M W a k u DEL
8: ( 8 H X h x   8: & 0 : D N X b l v
9: ) 9 I Y i y   9: ' 1 ; E O Y c m w
A: * : J Z j z
B: + ; K [ k {
C: , < L \ | |
D: - = M ] m }
E: . > N ^ n ~
F: / ? O _ o DEL

```

## NOTES

### History

An ascii manual page appeared in Version 7 of AT&T UNIX.

On older terminals, the underscore code is displayed as a left arrow, called backarrow, the caret is displayed as an up-arrow and the vertical bar has a hole in the middle.

Uppercase and lowercase characters differ by just one bit and the ASCII character 2 differs from the double quote by just one bit, too. That made it much easier to encode characters mechanically or with a microcontroller-based electronic keyboard and that pairing was found on old teletypes.

The ASCII standard was published by the United States Standards Institute (USASI) in 1968.

### SEE ALSO

charsets(7), iso\_8859-1(7), iso\_8859-2(7), iso\_8859-3(7),  
 iso\_8859-4(7), iso\_8859-5(7), iso\_8859-6(7), iso\_8859-7(7),  
 iso\_8859-8(7), iso\_8859-9(7), iso\_8859-10(7), iso\_8859-11(7),  
 iso\_8859-13(7), iso\_8859-14(7), iso\_8859-15(7), iso\_8859-16(7),  
 utf-8(7)

### COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A

description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

Linux

2020-06-09

ASCII(7)