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

NAME

ascii - the 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 (such as ISO 8859-1, the Linux default character set) contain ASCII as their lower half. The international counterpart of ASCII is known as ISO 646.

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'	100	64	40	@
001	1	01	SOH	101	65	41	A
002	2	02	STX	102	66	42	B
003	3	03	ETX	103	67	43	C
004	4	04	EOT	104	68	44	D
005	5	05	ENQ	105	69	45	E
006	6	06	ACK	106	70	46	F
007	7	07	BEL '\a'	107	71	47	G
010	8	08	BS '\b'	110	72	48	H
011	9	09	HT '\t'	111	73	49	I
012	10	0A	LF '\n'	112	74	4A	J
013	11	0B	VT '\v'	113	75	4B	K
014	12	0C	FF '\f'	114	76	4C	L
015	13	0D	CR '\r'	115	77	4D	M
016	14	0E	SO	116	78	4E	N
017	15	0F	SI	117	79	4F	O
020	16	10	DLE	120	80	50	P
021	17	11	DC1	121	81	51	Q
022	18	12	DC2	122	82	52	R
023	19	13	DC3	123	83	53	S
024	20	14	DC4	124	84	54	T
025	21	15	NAK	125	85	55	U
026	22	16	SYN	126	86	56	V
027	23	17	ETB	127	87	57	W
030	24	18	CAN	130	88	58	X
031	25	19	EM	131	89	59	Y
032	26	1A	SUB	132	90	5A	Z
033	27	1B	ESC	133	91	5B	[
034	28	1C	FS	134	92	5C	\ '\\'
035	29	1D	GS	135	93	5D	]
036	30	1E	RS	136	94	5E	^
037	31	1F	US	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

HISTORY

An ascii manual page appeared in Version 7 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 non-microcontroller-based electronic keyboard and that pairing was found on old teletypes.

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

SEE ALSO

iso_8859_1(7), iso_8859_15(7), iso_8859_7(7)