

ASCII

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What is ASCII?

ASCII is abbreviated from American Standard Code for Information Interchange, is a character encoding standard for electronic communication. ASCII codes represent text in computers, telecommunications equipment, and other devices. Because of technical limitations of computer systems at the time it was invented, ASCII has just 128 code points, of which only 95 are printable characters, which severely limited its scope. Many computer systems instead use Unicode, which has millions of code points, but the first 128 of these are the same as the ASCII set.

The History of ASCII

Sometimes referred to as US-ASCII, ASCII was an American innovation developed in the 1960s. The standard has undergone many revisions since, primarily in 1977 and 1986, when ASCII was last updated.

Extensions and variations have built upon ASCII over the years, mainly to cater for the fact that ASCII omits many characters used, or even required, by languages other than US English. ASCII does not even cater for the UK currency symbol (“£”), although the pound is present in Latin-1, an 8-bit extension developed in the 1980s, which encodes several other currencies too.

What Characters Does ASCII Represent?

To a computer, the letter “A” is just as unfamiliar as the color purple or the feeling of jealousy. Computers deal in ones and zeroes, and it’s up to humans to decide how to use those ones and zeroes to represent numbers, words, images, and anything else.

You can think of ASCII as the Morse code of the digital world—the first attempt, anyway. Whilst Morse code is used to represent just 36 different characters (26 letters and 10 digits), ASCII was designed to represent up to 128 different characters in 7 bits of data.

ASCII is case-sensitive, meaning it represents 52 upper and lower case letters from the English alphabet. Alongside the same 10 digits, that’s about half the space used.

How does ASCII table look like?

ASCII TABLE

Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char
0	0	[NUL]	32	20	[SPACE]	64	40	@	96	60	`
1	1	[START OF HEADING]	33	21	!	65	41	A	97	61	a
2	2	[START OF TEXT]	34	22	"	66	42	B	98	62	b
3	3	[END OF TEXT]	35	23	#	67	43	C	99	63	c
4	4	[END OF TRANSMISSION]	36	24	\$	68	44	D	100	64	d
5	5	[ENQUIRY]	37	25	%	69	45	E	101	65	e
6	6	[ACKNOWLEDGE]	38	26	&	70	46	F	102	66	f
7	7	[BELL]	39	27	'	71	47	G	103	67	g
8	8	[BACKSPACE]	40	28	(	72	48	H	104	68	h
9	9	[HORIZONTAL TAB]	41	29	)	73	49	I	105	69	i
10	A	[LINE FEED]	42	2A	>	74	4A	J	106	6A	j
11	B	[VERTICAL TAB]	43	2B	+	75	4B	K	107	6B	k
12	C	[FORM FEED]	44	2C	,	76	4C	L	108	6C	l
13	D	[CARRIAGE RETURN]	45	2D	-	77	4D	M	109	6D	m
14	E	[SHIFT OUT]	46	2E	.	78	4E	N	110	6E	n
15	F	[SHIFT IN]	47	2F	/	79	4F	O	111	6F	o
16	10	[DATA LINK ESCAPE]	48	30	0	80	50	P	112	70	p
17	11	[DEVICE CONTROL 1]	49	31	1	81	51	Q	113	71	q
18	12	[DEVICE CONTROL 2]	50	32	2	82	52	R	114	72	r
19	13	[DEVICE CONTROL 3]	51	33	3	83	53	S	115	73	s
20	14	[DEVICE CONTROL 4]	52	34	4	84	54	T	116	74	t
21	15	[NEGATIVE ACKNOWLEDGE]	53	35	5	85	55	U	117	75	u
22	16	[SYNCHRONOUS IDLE]	54	36	6	86	56	V	118	76	v
23	17	[END OF TRANS. BLOCK]	55	37	7	87	57	W	119	77	w
24	18	[CANCEL]	56	38	8	88	58	X	120	78	x
25	19	[END OF MEDIUM]	57	39	9	89	59	Y	121	79	y
26	1A	[SUBSTITUTE]	58	3A	:	90	5A	Z	122	7A	z
27	1B	[ESCAPE]	59	3B	;	91	5B	[	123	7B	{
28	1C	[FILE SEPARATOR]	60	3C	<	92	5C	\	124	7C	|
29	1D	[GROUP SEPARATOR]	61	3D	=	93	5D	]	125	7D	}
30	1E	[RECORD SEPARATOR]	62	3E	>	94	5E	^	126	7E	~
31	1F	[UNIT SEPARATOR]	63	3F	?	95	5F	_	127	7F	[DEL]

THE END

SOURCES OF INFORMATION:-

<https://www.makeuseof.com/>

https://en.wikipedia.org/wiki/Main_Page

THANK YOU.