

ASCII Table Chart: The Complete Reference for Developers

This chart offers a comprehensive look at the ASCII (American Standard Code for Information Interchange) character set. It lays out the decimal, hexadecimal, octal, and 7-bit binary representations for each character, alongside its common symbol or abbreviation and a brief description. It's a foundational resource for anyone working in computing, from software developers to network specialists, and helps demystify how computers handle text.

DEC ↕	HEX ↕	OCT ↕	BIN (7-BIT) ↕	CHAR ↕	DESCRIPTION ↕
0	00	000	0000000	NUL	Null character. Often used as a string terminator.
1	01	001	0000001	SOH	Start of Header. Marks the beginning of a data packet.
2	02	002	0000010	STX	Start of Text. Indicates the start of the text portion of a message.
3	03	003	0000011	ETX	End of Text. Marks the end of the text portion of a message.
4	04	004	0000100	EOT	End of Transmission. Signals the end of a transmission.
5	05	005	0000101	ENQ	Enquiry. Used to request a response from another station.
6	06	006	0000110	ACK	Acknowledge. Confirms successful reception of a message.
7	07	007	0000111	BEL	Bell. Produces an audible or visible alert.
8	08	010	0001000	BS	Backspace. Moves the cursor one position backward.
9	09	011	0001001	HT	Horizontal Tab. Moves the cursor to the next tab stop.
10	0A	012	0001010	LF	Line Feed. Advances the cursor to the next line.
11	0B	013	0001011	VT	Vertical Tab. Moves the cursor to the next vertical tab stop.
12	0C	014	0001100	FF	Form Feed. Advances the printer to the top of the next page.
13	0D	015	0001101	CR	Carriage Return. Moves the cursor to the beginning of the current line.
14	0E	016	0001110	SO	Shift Out. Activates an alternative character set.
15	0F	017	0001111	SI	Shift In. Deactivates an alternative character set.
16	10	020	0010000	DLE	Data Link Escape. Changes the meaning of a limited number of following characters.
17	11	021	0010001	DC1	Device Control 1 (XON). Used to turn on a device.
18	12	022	0010010	DC2	Device Control 2. General purpose device control.
19	13	023	0010011	DC3	Device Control 3 (XOFF). Used to turn off a device.
20	14	024	0010100	DC4	Device Control 4. General purpose device control.
21	15	025	0010101	NAK	Negative Acknowledge. Indicates unsuccessful reception of a message.
22	16	026	0010110	SYN	Synchronous Idle. Used to establish or maintain synchronization.
23	17	027	0010111	ETB	End of Transmission Block. Marks the end of a block of data.
24	18	030	0011000	CAN	Cancel. Indicates that the preceding data is in error.
25	19	031	0011001	EM	End of Medium. Indicates the physical end of a data medium.
26	1A	032	0011010	SUB	Substitute. Used to replace a character known to be invalid.
27	1B	033	0011011	ESC	Escape. Provides for extensions to the character set or control functions.
28	1C	034	0011100	FS	File Separator. Separates files in a data stream.
29	1D	035	0011101	GS	Group Separator. Separates groups of related data.
30	1E	036	0011110	RS	Record Separator. Separates records in a group.
31	1F	037	0011111	US	Unit Separator. Separates units of data within a record.
32	20	040	0100000		Space character. A non-printing character that creates a blank space.

DEC ↕	HEX ↕	OCT ↕	BIN (7-BIT) ↕	CHAR ↕	DESCRIPTION ↕
34	22	042	0100010	"	Double quote.
35	23	043	0100011	#	Hash or pound sign.
36	24	044	0100100	\$	Dollar sign.
37	25	045	0100101	%	Percent sign.
38	26	046	0100110	&	Ampersand.
39	27	047	0100111	'	Single quote or apostrophe.
40	28	050	0101000	(	Opening parenthesis.
41	29	051	0101001	)	Closing parenthesis.
42	2A	052	0101010	*	Asterisk or star.
43	2B	053	0101011	+	Plus sign.
44	2C	054	0101100	,	Comma.
45	2D	055	0101101	-	Hyphen or minus sign.
46	2E	056	0101110	.	Period or dot.
47	2F	057	0101111	/	Slash or forward slash.
48	30	060	0110000	0	Digit zero.
49	31	061	0110001	1	Digit one.
50	32	062	0110010	2	Digit two.
51	33	063	0110011	3	Digit three.
52	34	064	0110100	4	Digit four.
53	35	065	0110101	5	Digit five.
54	36	066	0110110	6	Digit six.
55	37	067	0110111	7	Digit seven.
56	38	070	0111000	8	Digit eight.
57	39	071	0111001	9	Digit nine.
58	3A	072	0111010	:	Colon.
59	3B	073	0111011	;	Semicolon.
60	3C	074	0111100	<	Less-than sign.
61	3D	075	0111101	=	Equals sign.
62	3E	076	0111110	>	Greater-than sign.
63	3F	077	0111111	?	Question mark.
64	40	100	1000000	@	At sign.
65	41	101	1000001	A	Uppercase letter A.
66	42	102	1000010	B	Uppercase letter B.
67	43	103	1000011	C	Uppercase letter C.
68	44	104	1000100	D	Uppercase letter D.
69	45	105	1000101	E	Uppercase letter E.
70	46	106	1000110	F	Uppercase letter F.
71	47	107	1000111	G	Uppercase letter G.

DEC ↕	HEX ↕	OCT ↕	BIN (7-BIT) ↕	CHAR ↕	DESCRIPTION ↕
73	49	111	1001001	I	Uppercase letter I.
74	4A	112	1001010	J	Uppercase letter J.
75	4B	113	1001011	K	Uppercase letter K.
76	4C	114	1001100	L	Uppercase letter L.
77	4D	115	1001101	M	Uppercase letter M.
78	4E	116	1001110	N	Uppercase letter N.
79	4F	117	1001111	O	Uppercase letter O.
80	50	120	1010000	P	Uppercase letter P.
81	51	121	1010001	Q	Uppercase letter Q.
82	52	122	1010010	R	Uppercase letter R.
83	53	123	1010011	S	Uppercase letter S.
84	54	124	1010100	T	Uppercase letter T.
85	55	125	1010101	U	Uppercase letter U.
86	56	126	1010110	V	Uppercase letter V.
87	57	127	1010111	W	Uppercase letter W.
88	58	130	1011000	X	Uppercase letter X.
89	59	131	1011001	Y	Uppercase letter Y.
90	5A	132	1011010	Z	Uppercase letter Z.
91	5B	133	1011011	[	Opening square bracket.
92	5C	134	1011100	\	Backslash.
93	5D	135	1011101	]	Closing square bracket.
94					

95 rows