

## ASCII (American Standard Code for Information Interchange) codes

There are 128 ASCII codes from 0 to 127. ASCII codes 0 to 31 represent special commands so they are not included in this table. ASCII 32 stands for a **space**, for example, between two words. Character 72 is a capital **H**, whereas character 104 is a lower case **h**. The message 72 101 108 108 111 means Hello.

Each character you type is translated by the computer into the corresponding base 2 number. This is necessary because the electronic circuits only have two 'digits' : on and off. In the electronic circuits of the computer, **1** means a switch is **on** and **0** means that a switch is **off**, so that each digit of a base 2 number acts as a switch, turning connections on and off.

As a base 2 number, Hello becomes 01001000 01100101 01101100 01101100 01101111. Notice here that zeros are written in front so that each base 2 number has exactly eight digits. Each 8-digit base 2 number is called a **byte**.

ASCII	Character	ASCII	Character	ASCII	Character	ASCII	Character	ASCII	Character	ASCII	Character
32	space	48	0	64	@	80	P	96	`	112	p
33	!	49	1	65	A	81	Q	97	a	113	q
34	"	50	2	66	B	82	R	98	b	114	r
35	#	51	3	67	C	83	S	99	c	115	s
36	\$	52	4	68	D	84	T	100	d	116	t
37	%	53	5	69	E	85	U	101	e	117	u
38	&	54	6	70	F	86	V	102	f	118	v
39	'	55	7	71	G	87	W	103	g	119	w
40	(	56	8	72	H	88	X	104	h	120	x
41	)	57	9	73	I	89	Y	105	i	121	y
42	*	58	:	74	J	90	Z	106	j	122	z
43	+	59	;	75	K	91	[	107	k	123	{
44	,	60	<	76	L	92	\	108	l	124	
45	-	61	=	77	M	93	]	109	m	125	}
46	.	62	>	78	N	94	^	110	n	126	~
47	/	63	?	79	O	95	_	111	o	127	□