

Alphanumeric Representation

- Characters and symbols are encoded as numbers
 - 1s and 0s as a byte
 - Note: the conversion to the character occurs at the peripheral device. The machine itself has no perception of what the bits stand for.
- Standard encoding is called ASCII (7 bits, extended to 8 later) or ANSI
 - American Standard Code for Information Interchange
 - **American National** Standards Institute
- Strings
 - A set of characters with length and location
 - In C, string always terminated by NULL char
 - In Pascal, a string defined as a pointer to an array with first byte giving the length
 - In assembly, a string defined as a adjacent set of bytes (terminated or not by a null char) in memory with address of the first byte recorded in a label e.g. a pointer to an array of bytes

Char from ASCII

Bit=>	7	6	5	4	3	2	1	0	Octal	Hex	Char?
	0	1	0	0	1	0	0	0	110 ₈		
	0	1	1	0	0	1	0	1	145 ₈		
	0	1	1	0	1	1	0	0	154 ₈		
	0	1	1	0	1	1	0	0	154 ₈		
	0	1	1	0	1	1	1	1	157 ₈		

