EE/CS 10b Spring 22-23

Data Types							
Size	Constant Pseudo-Op	Bits	Description	Range			
Byte (8 bits)	.DB	7	Character	all			
		7 S: 1 1 1 1 1 1 1	Signed Integer	-128 to +127			
		7 0	Unsigned Integer	0 to 255			
		7 0 High Digit Low Digit	Packed BCD	0 to 99			
		7 [0 [†] 0 [†] 0 [†] 0 Digit	Unpacked BCD	0 to 9			
Word (16 bits)	.DW	15 S 1 1 1 1 1 Addr + 1 Addr	Signed Integer	-32768 to +32767			
		15 1 1 1 1 1 1 1 Addr + 1 Addr	Unsigned Integer	0 to 65535			
		15 1 1 1 1 1 1 1 Addr + 1 0 Addr	16-bit Address	0 to FFFF ₁₆			

Size	Constant Pseudo-Op	Bits	Description	Range
Double Word (32 bits)	.DD	31 S 1 1 1 Addr + 3 Addr + 2 Addr + 1 Addr + 2 Addr + 1 Add	Signed Integer	-2147483648 to +2147483647
		31	Unsigned Integer	0 to 4294967296
		31 S Exponent Addr + 3 Addr + 2 Addr + 1 Addr + 2 Addr + 1 Addr + 1 Addr + 1 Addr + 2 Addr + 1 Addr + 1 Addr + 1 Addr + 1 Addr + 2 Addr + 1 Addr	Single Precision Floating Point	Exponent: ±38 Precision: 6 digits
Quad Word (64 bits)	.DQ	03 S	Signed Integer	-9.2 x 10 ¹⁸ to +9.2 x 10 ¹⁸
		a3	Unsigned Integer	0 to 1.84 x 10 ¹⁹
		o3 S 1 Ekphreht Addr + 7 Addr + 6 Addr + 6 Addr + 5 Addr + 5 Addr + 3 Addr + 2	Double Precision Floating Point	Exponent: ±308 Precision: 15 digits