ASCII Code(Hex table)

00 NUL	10 DLE	20 SP	30 0	40 @	50 P	60 `	70 p
01 SOH	11 DC1	21 !	31 1	41 A	51 Q	61 a	71 q
02 STX	12 DC2	22 "	32 2	42 B	52 R	62 b	72 r
03 ETX	13 DC3	23 #	33 3	43 C	53 S	63 c	73 s
04 EOT	14 DC4	24 $	34 4	44 D	54 T	64 d	74 t
05 ENQ	15 NAK	25 %	35 5	45 E	55 U	65 e	75 u
06 ACK	16 SYN	26 &	36 6	46 F	56 V	66 f	76 v
07 BEL	17 ETB	27 '	37 7	47 G	57 W	67 g	77 w
08 BS	18 CAN	28 (	38 8	48 H	58 X	68 h	78 x
09 HT	19 EM	29)	39 9	49 I	59 Y	69 i	79 y
0A LF	1A SUB	2A *	3A :	4A J	5A Z	6A j	7A z
0B VT	1B ESC	2B +	3B ;	4B K	5B [	6B k	7B {
0C FF	1C FS	2C ´	3C <	4C L	5C \	6C l	7C |
0D CR	1D GS	2D -	3D =	4D M	5D]	6D m	7D }
0E SO	1E RS	2E .	3E >	4E N	5E ^	6E n	7E ~
0F SI	1F US	2F /	3F ?	4F O	5F _	6F o	7F DEL

Converting Enter value to ASCII code

Enter value

45 6E 74 65 72 20 76 61 6C 75 65 3A

nibble - 4 bits
byte - 8 bits
word - 2 bytes- 16 bit
double word - 4 bytes - 32 bit

1 hex value - 4 bits
2 hex values - 8 bits - 1 byte

Finding 2 compliment

1> if you have a positive number then there will be no need to find 2 compliment

2> If we want to find negative value of number we need to 2 compliment

4
double word 00000004 word -0004 byte - 04

-4
binary number of 4
0000 0000 0000 0000 0000 0000 0000 0100
invert 0 to 1 and 1 to 0
1111 1111 1111 1111 1111 1111 1111 1011
add 1
1111 1111 1111 1111 1111 1111 1111 1100
FFFFFFFC - double word format FFFC- word format FC - Byte

Interpret 2's complement to decimal
1> check the value in the first position whether it is 1 or 0
1 indicate negative 0 indicate positive

2's compliment value - 0000f3e1
if we observe the first value 0 - 0000 ------>positive
for positive numbers we don't do any process, we directly convert them

0000f3e1--------> 62433

2's compliment value - FFFFFFFC
if we observe the first position F - 1111 --------> negative
as it indicates negative number, it indicates we have done 2's compliment process

FFFFFFFC
1111 1111 1111 1111 1111 1111 1111 1100

- 1

1111 1111 1111 1111 1111 1111 1111 1011
invert 0's and 1's
0000 0000 0000 0000 0000 0000 0000 0100---->-4

1100

- 1

1011

For unsigned num there will be no sign so we can directly convert them no need to check whether number is positive or not

unsigned : FF FE

FF FE ---- > 65534