Homework 2

1.Think about the function: show_bytes() in 2.1.4, and answer the question.

int val = 0x4587A5B1;

byte_pointer valp = (byte_pointer) &val;

A: show_bytes(valp,2);

B: show_bytes(valp,3);

C: show_bytes(valp,1);

	Little Endian	Big Endian
A		
B		
C		

2. Integer representation using 1's and 2's complement. Assume we have an integer type of 8bits, fill in the following table.

Value	**2's complement**	**1's complement**	**Sign-Magnitude**
27	00100111	00100111	00100111
	01100100		
		11110101	
			10010101
-32			

3. Review the B2U and B2T.

(1)B2U

$\mathrm{B2U}_8([00010001])$ $\mathrm{B2U}_8([01110101])$ $\mathrm{B2U}_8([01001001])$

$\mathrm{B2U}_8([10010001])$ $\mathrm{B2U}_8([11010101])$ $\mathrm{B2U}_8([11001111])$

(2)B2T

$\mathrm{B2T}_8([01010001])$ $\mathrm{B2T}_8([11101101])$ $\mathrm{B2T}_8([01001001])$

$\mathrm{B2T}_8([11110001])$ $\mathrm{B2T}_8([01101101])$ $\mathrm{B2T}_8([11110011])$