Exercise 7

Suppose that **A = 45** and **B = -13**, **C = 0** and **D** is a given number.

Notice: The placeholder for A, B, C and D is one byte (8 bits).

D is **unknown** and can be any number in the range of **0** and **255**.

D7	D6	D5	D4	D3	D2	D1	D0

1. Convert A, B and C to **binary** and **hexadecimal**
2. Calculate A + B, A - B, C - A and B - A.
3. Perform the following operations.
    a. A | B
    b. A & B
    c. A ^ B
    d. A << 3
    e. B >> 2
    f. C >> 5
    g. (A << 3) >> 3
    h. (~A & B) ^ (~C | A)
4. Using bitwise operators and masks
    a. Set the first and last bits of A
    b. Toggle (Flip) the third bit of B
    c. Read the value of 3rd and 4th bits of D (D2 and D3)
    d. Change the 3rd and 4th bits of D to *10* (D3 to *1* and D2 to *0*)