Guided Work Series N°03

Exercise 01:

In sign and absolute value representation, give the representation of all possible numbers using 4 bits.

Exercise 02:

In 1's complement representation, give the representation of all possible numbers using 4 bits.

Exercise 03:

In 2's complement representation, give the representation of all possible numbers using 4 bits.

Exercice 04:

Give, on 8 bits, the representations: sign and absolute value, 1's complement and 2's complement of the following integer values: -32 and -128.

Exercice 05:

Assuming the numbers are represented on 8 bits, perform the following operations: $(377)_8 + (001)_8$ and $(177)_8 + (200)_8$, in 1's complement and in 2's complement.

- **Convert the result to decimal.**

Exercice 06:

Give the signed decimal value of the number: $(B7)_{16}$ coded in 2's complement, on 8 bits.