

Exercise 01

- Perform the conversions of the following numbers to binary: 144_{10} , 16_H , 1320_8
- Perform the conversions of the following numbers to hexadecimal: 178_{10} , 45_8 , 111001111_2
- Perform the conversions of the following numbers to decimal: 11101_2 , $1A_H$, 17_8

Exercise 02

Perform the following operations:

1. In binary: $0011\ 1110 + 0100\ 1111$
2. In Hexadecimal: $7A + 17$
3. In Octal: $15 + 46$

Exercise 03

Perform the following operations:

1. In binary: $0011\ 1110 - 0100\ 1111$
2. In Hexadecimal: $A5 - 87$
3. In Octal: $15 - 46$

Exercise 04

Convert the following numbers to decimal, knowing that they are represented in 8 bits in two's complement (signed numbers): $7EH$, ACH , $80H$

Exercise 05

Perform the following addition operations in two's complement. Each number is represented in 8 bits in binary. Indicate if there is overflow for each operation:

1. $0011\ 1110 - 0100\ 1111$
2. $1010\ 0101 - 1000\ 0111$
3. $0000\ 1101 - 0010\ 0110$