C Programming

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TP 00

Exercice 1:

Write a function that takes an integer, and checks it the most significant bit of it is set or not.
Your function must be declared as follows:

```
void check_msb(int num);
```

Example:
If you pass 0 to **check_msb**, it will print "msb is not set"
Write a program that takes an integer and uses the function check_msb on it.

Exercice 2:

Write a function that takes a byte, and prints it in binary.
Your function must be declared as follows:

```
void print_bits(unsigned char byte);
```

Example:
If you pass 2 to print_bits, it will print "00000010"
Write a program that takes a byte and uses the function print_bits to display its binary.

Exercice 3:

write a header file for your functions, and a separate main to test all of them.

Exercice 4: (Bonus)

Write a function that takes two integers n and m, and prints in binary the nth byte of m.
Your function must be declared as follows:

```
void print_nth_byte(int n, int m);
```

Example:
If you pass (2, 1) to print_nth_byte, the output will be "00000010"

Add a test for this function in your main.

Exercice 5: (Bonus)

Create a library of your bitwise functions, then Write a program that uses some of the functions in your library.