

## CIS 211 Lab 6

### Read

Michal's page ([https://uo-cis211.github.io/chapters/06\\_1\\_Bits](https://uo-cis211.github.io/chapters/06_1_Bits)) is a really good reference to this exercise. You don't have to read it before start doing it. But it probably can answer the question you might have.

### Exercise 1

What is the result of executing the following commands in a python console?

>>> a = 34	
>>> bin(a)	
>>> b = 23	
>>> bin(b)	
>>> a & b	
>>> bin(a & b)	
>>> a   b	
>>> bin(a   b)	

>>> a >> 1	
>>> a >> 2	
>>> a >> 3	
>>> b << 1	
>>> b << 2	
>>> b << 3	

### Exercise 2

Write a function `extrac1_3` that takes an int `word` and extract bits 1 to 3, including bit 1 and 3.