

## Set 1

- use conventions
- specifications, pseudocode, representation

1. Find the maximum in a sequence of numbers.

- a) specification
- b) subalg. design (pseudocode)

2. Verify if a number is prime.

- a) specification
- b) subalg. design (pseudocode)

For the next problems:

- a) DS
- b) (non-ambiguous) specification & pseudocode for subalg.

c) give a different representation

- compare mem. size for the given representations
- (write and) compare the subalg. complexities  
(for each DS you have defined)

3. Verify if a binary relation is a function

4. Verify if a function is injective

5. Verify if a binary relation is reflexive