

## TD N° : 02

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### Exercise 1:

Write the recursive function that calculates the power of a positive integer.

### Exercise 2:

Write Euclid's algorithm (PGCD) in the form of a recursive function.

### Exercise 3:

Write a recursive function that calculates and displays the number of digits of a strictly positive integer given by the user.

*Execution example:*

Give a positive integer: 28579

This number has 5 digits.

### Exercise 4:

Consider T an array of integers:

- 1- Write the procedures that display the elements of the T (increasing and decreasing mode).
- 2- Write a recursive function which allows to search a given element in T.

### Exercise 5:

Write a recursive function to check if a character string is a palindrome (A palindrome is a character string that can be read in both directions).

Exp: Madam, Radar, Refer ...etc