University of Biskra
Mathematics Department
Module: Algorithmics and Data Structures 2
1st year   2024/2025

TD N° : 02

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