

# Data Structures

## Lab 5: Recursion implementation

### Case Study: *Tower of Hanoi*

**Recursion** is a programming technique in which a method call itself. The key to being able to program recursively is be able to think recursively.

Any recursive definition must have a non-recursive part, called the base case, which permits the recursion to eventually end.

#### Lab work:

In this lab we are going to use **Recursion** technique to solve many problems using java. And the most important problem is **Tower of Hanoi** which its solution is an excellent demonstration of recursion elegance.

In addition, we going to solve some mathematical problem such like: reverse a number and sum of digits. Each of these problem will be in different programs.

