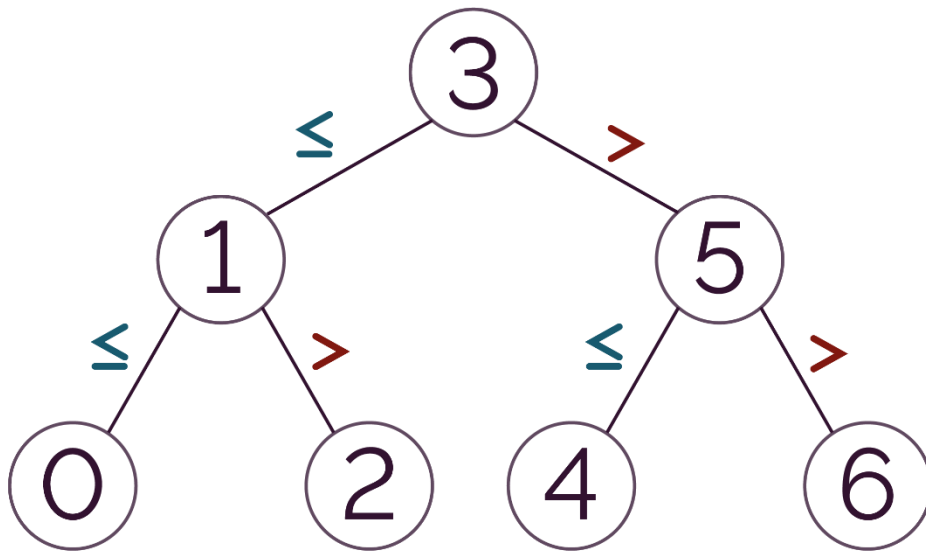# Correction TD11 – Groupe 1

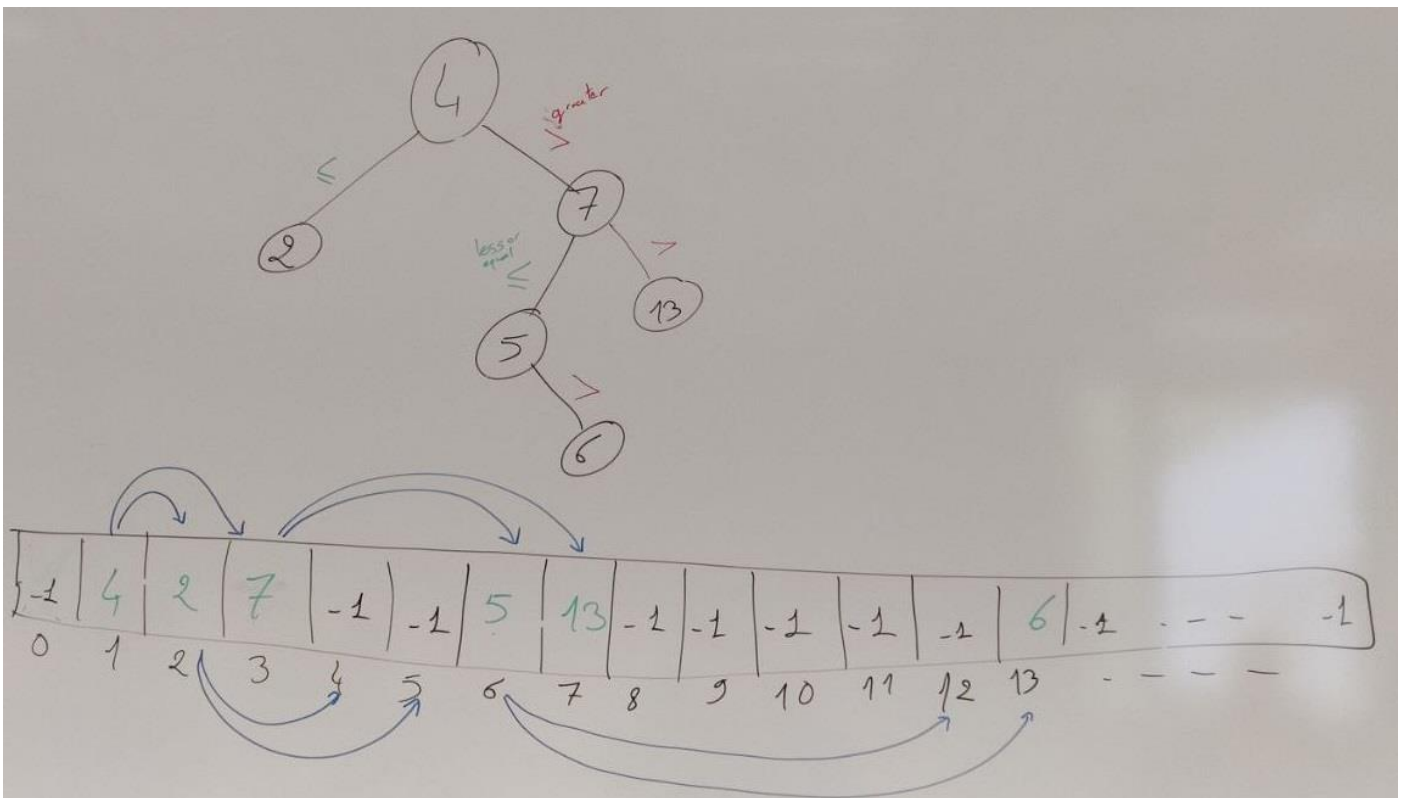**Binary search tree :**

Left-hand elements: smaller than or equal to the node.

Right-hand elements: greater than the node.

Exercise 1:

A & B -

C-

```
static int plusGrand ( int[] tree){
    int n = 1;
    while ( (tree[(n*2)+1)] != -1) && ((n*2)+1) < tree.length)){
        n = (n*2)+1;
    }
    return (tree[n]);
}
```

Exercise 2:

A -

```
static boolean identical ( String str){
    if (str.length() == 0){
        return false;
    } else {

        for (int i=0; i< str.length()-1; i++){
            if ( str.charAt(i) != str.charAt(i+1)){
                return false;
            }
        }
        return true;
    }
}
```

B & C -

```java
import java.io.*;

static void batman() throws IOException {
    BufferedReader br = new BufferedReader
                    (new FileReader("monFichier.txt"));
    String line = br.readLine(), identiLine = "";
    int counter = 0;
    while (line != null) {
        if (identical(line)) {
            counter++;
            identiLine = line;
        }
        line = br.readLine();
    }
    Sop("The file contains " + counter + " lines with identical caracters");
    Sop(identiLine);
    br.close();
}
```