

## Implementazione BINARY TREE in pseudocodice

TREE Tree(ITEM  $v$ )

```
TREE  $t = \text{new TREE}$ 
 $t.parent \leftarrow \text{nil}$ 
 $t.left \leftarrow t.right \leftarrow \text{nil}$ 
 $t.value \leftarrow v$ 
```

**ritorna**  $t$

insertLeft(TREE  $t$ )

```
se  $left \neq \text{nil}$  allora
     $t.parent \leftarrow \text{this}$ 
     $left \leftarrow t$ 
```

insertRight(TREE  $t$ )

```
se  $right \neq \text{nil}$  allora
     $t.parent \leftarrow \text{this}$ 
     $right \leftarrow t$ 
```

deleteLeft(TREE  $t$ )

```
se  $left \neq \text{nil}$  allora
     $left.deleteLeft$ 
     $left.deleteRight$ 
     $left \leftarrow \text{nil}$ 
```

deleteRight(TREE  $t$ )

```
se  $right \neq \text{nil}$  allora
     $right.deleteLeft$ 
     $right.deleteRight$ 
     $right \leftarrow \text{nil}$ 
```