

ADT : SortedMap

Extra Operation : add all pairs from sm, whose key is not in the sortedMap already

```
function add(k, v)
  current <- root
  parent <- NIL

  while current <> NIL execute
    parent <- current
    if current.info.first = k then
      oldValue <- current.info.second
      current.info.second <- v
      add <- oldValue
    else if relation(k, current.info.first) then
      current <- current.left
    else
      current <- current.right
    end-if
  end-while

  newNode <- Node(k, v)
  if root = NIL then
    root <- newNode
  else if relation(k, current.info.first) then
    parent.left <- newNode
  else
    parent.right <- newNode
  end-if

  numberOfElements <- numberOfElements + 1
  add <- NULL_TVALUE
end-function

function addIfNotPresent(sm)
  it <- sm.iterator()
  nr <- 0

  while it.valid() execute
    if search(it.getCurrent().first) = NULL_TVALUE
      nr <- nr + 1
      add(it.getCurrent().first, it.getCurrent().second)
    end-if
  end-while
  addIfNotPresent <- nr
end-function
```