```
Algorithm height(T)
        return heightHelper(T, T.root())

Algorithm heightHelper(T, p)
        if T.isExternal(p) then
                return 0
        lh := heightHelper(T, T.leftChild(p))
        rh := heightHelper(T, T.rightChild(p))
        return 1 + MAX(lh, rh)

Algorithm isValidAVL(T)
        (valid, h) := isValidAVL(T, T.root())
        return valid

Algorithm isValidAVL(T, p)
        if T.isExternal(p) then
                return (true, 0)
        (lvalid, lh) := isValidAVL(T, T.leftChild(p))
        (rvalid, rh) := isValidAVL(T, T.rightChild(p))
        pvalid := ABS(lh − rh) <= 1
        return (lvalid /\ rvalid /\ pvalid, 1 + MAX(lh, rh))


Algorithm isValidAVL(T, p)
        if T.isExternal(p) then
                return 0
        lh := isValidAVL(T, T.leftChild(p))
        rh := isValidAVL(T, T.rightChild(p))
        if lh < 0 \/ rh < 0 then
                return -1
        if ABS(lh − rh) > 1 then
                return -1

        return 1 + MAX(lh, rh)
```