

**procedure** *DTLearning*(*exps*, *attrs*, *parent\_exps*)

▷ *exps*:examples

▷ *attrs*:attributes

▷ *parent\_exps*:parent examples

▷ *MCO*(*exps*):Most Common Output in the examples

**if** *exps* is empty **then return** *MCO*(*parent\_exps*)

**else if** all *exps* have the same label **then return** the label

**else if** *attrs* is empty **then return** *MCO*(*parent\_exps*)

**else**

$A \leftarrow \operatorname{argmax}_{a \in \text{attrs}} \text{Importance}(a, \text{exps})$

*tree*  $\leftarrow$  a new decision tree with root test *A*

**for** each value  $v_k$  of *A* **do**

$\text{exs} \leftarrow \{e : e \in \text{exps} \wedge e.A = v_k\}$

*subtree*  $\leftarrow \text{DTLearning}(\text{exs}, \text{attrs} - A, \text{exps})$

add a branch to *tree* with label ( $A = v_k$ ) and subtree *subtree*

**end for**

**end if**

**return** *tree*

**end procedure**