
Algorithm 6 Template for Transformed Insert Function

```
1: function INSERT(int key, Desc* desc, int opid)
2:   NodeInfo* info  $\leftarrow$  new NodeInfo
3:   info.desc  $\leftarrow$  desc, info.opid  $\leftarrow$  opid
4:   while true do
5:     Node* curr  $\leftarrow$  DO_LOCATEPRED(key)
6:     if ISNODEPRESENT(curr, key) then
7:       ret  $\leftarrow$  UPDATEINFO(curr, info, false)
8:     else
9:       Node* n  $\leftarrow$  new Node
10:      n.key  $\leftarrow$  key, n.info  $\leftarrow$  info
11:      ret  $\leftarrow$  DO_INSERT(n)
12:      if ret = success then
13:        return true
14:      else if ret = fail then
15:        return false
```
