

DetermineMLCA {

1. *for each* KC KC_i {

2. $S_{MLCA}^{MLCA} \leftarrow null$ // Initialize set S_{MLCA}^{MLCA} to null

3. $T \leftarrow KC_i$

4. **ExamineGO** (T) {

5. $T' \leftarrow getAncestor(T)$ { //assign ancestor of node T to T'

6. *if* ($T' \neq MLCA$) {

7. *if* ($DPT_{T'} \neq DPT_{MLCA}$ & $DPT_{T'} \notin S_{MLCA}^T$) {

8. $\{ S_{MLCA}^{T'} \leftarrow S_{MLCA}^T \cup DPT_{T'}$

9. **ExamineGO** (T') //examine T' recursively

10. *else report* “meaningless LCA” *and exit*

} //end *if*

11. *}* //end *if*

12. *}* //end subroutine **ExamineGO**

13. *}* //end *for*

14. *Report* “meaningful LCA”

15. *}* //end the algorithm