
Algorithm 8 Get common axioms from son classes and addition to parent classes

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1: procedure GET COMMON AXIOMS FROM SONS AND ADD TO PARENT
   CLASSES
2:   loadontology(ontology);
3:   class parent = getSuperClass();
4:   getAllEquivalentClasses(parent);
5:   function GETALLEQUIVALENTCLASSES(PARENT)
6:     List equivalentClasses = getEquivalentClass(parent);
7:     Iterator subClasses = getSubclasses(parent);
8:     while subClasses.hasNext() do
9:       getAllEquivalentClasses(subClasses)
10:      Set equivalentClassSons = getAllEquivalentClasses(subClasses);
11:      Set elementsFromIntersection;
12:      Set equivalentClassSons2;
13:      while (equivalentClassSons.hasNext()) do
14:        if equivalentClassSons is intersectionOf then
15:          elementsFromIntersection(decomposeIntersectionAxioms(equivalentClass));
16:        end if
17:        if equivalentClassSons is not intersectionOf then
18:          elementsFromIntersection(equivalentClass);
19:        end if
20:      end while
21:      if equivalentClassSons2 == null then
22:        equivalentClassSons2 = elementsFromIntersection;
23:      end if
24:      if equivalentClassSons2 != null then
25:        equivalentClassSons2 = findCommonAx-
   ioms(equivalentClassSons2, elementsFromIntersection);
26:      end if
27:    end while
28:    if equivalentClassSons2 != null then
29:      addEquivalentClasses(parent, equivalentClassSons2);
30:    end if
31:  end function
32: end procedure

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