Algorithm 1. LOM-PE algorithm

Input: ontology $O_1$, ontology $O_2$
Output: matching results

1 Function $LOMPE\_Algorithm(O_1, O_2)$

2 begin
3     foreach $L_i \in O_1$ do
4         ComputeSim($L_i$)
5     end
6 end

7 Function $ComputeSim(L = (a_1, a_2,\ldots, a_n))$

8 begin
9     $PAE \leftarrow GetPAnchorsE(\frac{n}{2})$
10    $PSE \leftarrow PredictNewPSE(PAE)$
11    $ComputeSim(L_a = (a_1, a_2,\ldots, a_{\frac{n}{2}+1}))$
12    $ComputeSim(L_b = (a_{\frac{n}{2}+1},\ldots, a_n))$
13    if $|L| \leq 1$ then
14        return
15    end
16 end

17 Function $GetPAnchorsE(a_i)$

18 begin
19     foreach $b_j \in O_2$ do
20         if $(a_i, b_j) \in PSE$ then
21             continue
22         end
23         $Sim(a_i, b_j) \leftarrow Compute(a_i, b_j)$
24         if $Sim(a_i, b_j) > ptValue$ then
25             $PAECandi \leftarrow PAECandi \cup b_j$
26         end
27     end
28     $PAE \leftarrow MaxTopk(PAECandi)$
29 end