

1 **merge_call_site:**

2 **input:** *Threshold T, Program P*

3 **output:** *Program P'*

4 **if** $(\ell_b, \ell_1, \ell_2) = \text{find_joinable_calls}(P)$:

5 $P' = \text{merge_cfg}(P, \ell_b, \ell_1, \ell_2)$

6 **return** $\text{merge_call_site}(T, P')$

7 **else:**

8 $P' = P$

9 **return** P'

10
11 **find_joinable_calls():**

12 **input:** *Threshold T, Program P*

13 **output:** *(Label ℓ_b , Label ℓ_1 , Label ℓ_2)*

14 **for** each branch ℓ_b in P :

15 **let** ℓ_p = post-dominator of ℓ_b

16 **if** \exists path t_1 from ℓ_b to ℓ_p

17 \exists path t_2 from ℓ_b to ℓ_p

18 $t_1 \cap t_2 = \emptyset$

19 $t_1 \supset$ call to F at ℓ_1

20 $t_2 \supset$ call to F at ℓ_2

21 **return** (ℓ_b, ℓ_1, ℓ_2)