EECS3311 Software Design (Fall 2020)

Q&A - Lecture Series W12

Tuesday, December 8

① $wp(\_\_\_\_\_, \_\_\_\_\_) = ??$

② $\boxed{\{Q\}\ S\ \{R\}}$ predicate ↳ T, F.

$\Updownarrow$

$Q \Rightarrow wp(S, R)$

↳ ① wp calculation

② how to prove/disprove ⇒

③ English interpretation of this proof condition

③ LI : (partial correctness)
LV : (termination)] total correctness.

④ Violation of LI or LV.

Assume the following object declarations and creations:

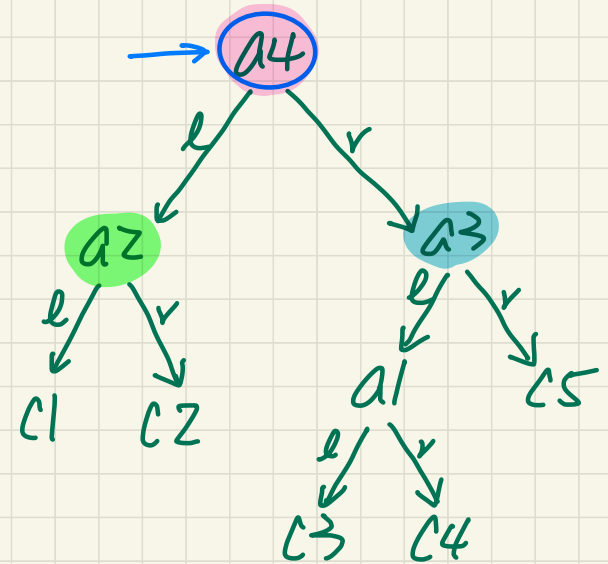
c1, c2, c3, c4, c5: CONSTANT
a1, a2, a3, a4: ADDITION
v: VISITOR
create {EVALUATOR} v.make
create c1.make(1)
create c2.make(2)
create c3.make(3)
create c4.make(4)
create c5.make(5)
create a1.make(c3, c4)
create a2.make(c1, c2)
create a3.make(a1, c5)
create a4.make(a2, a3)

Upon the completion of the following routine call:

a4.accept(v)

How many instances of double dispatch would have occurred? Enter an **integer** value.

Answer:



a4.accept(v)
↳ ① {ADDITION}.accept
② {EVALUATOR}.visit_add(a4)
↳ ② a4.left.accept(eval_l)
③ a4.right.accept(eval_r)