

Formal Methods in Software Development

Exercise 4

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Submit the results as a single PDF file in the Moodle interface of this exercise.

Consider your programs formalized in Exercise 3.

1. Provide manually partial/total correctness proofs of STR_1 and STR_2 by a “traditional” mathematical method: induction on a number of loop executions.
2. Provide manually partial/total correctness proofs of STR_1 and STR_2 by using additionally Floyd-Hoare calculus specified for (E)EL program algebras.