

Assignment 6

Submit exactly 5 Isabelle files as follows. Please do not submit them in a zip file or any other archive format.

1)

Follow the instructions in the file Sample_Exam.pdf and submit the 3 Isabelle files with the correct proofs.

2)

Prove the following formula in MiniCalc:

$$(\forall x. \neg r\ x \longrightarrow r\ (f\ x)) \longrightarrow (\exists x. r\ x \wedge r\ (f\ (f\ x)))$$

Use "Copy Result to Clipboard" as the proof.

Make sure that the "theory" command imports MiniCalc and remember the "end" command at the end.

Also make sure that Isabelle processes the whole file without errors.

Do not submit files like MainProof.thy or MiniCalc.thy given in DTU Learn.

3)

Solve exercise 4.7 in the "Programming and Proving in Isabelle/HOL" tutorial.

Please try to keep each line shorter than 100 characters.

Make sure that the "theory" command imports Main and remember the "end" command at the end.

Also make sure that Isabelle processes the whole file without errors.