Assignment 2

Submit exactly 2 Isabelle files as follows.

1)

Prove the following formulas in MiniCalc:

```
¬ ¬ p ⟶ p

(q ⟶ r) ⟶ (p ⟶ q) ⟶ p ⟶ r

(p ⟶ q ⟶ r) ⟶ q ⟶ p ⟶ r

(p ⟶ q ⟶ r) ⟶ (p ⟶ q) ⟶ p ⟶ r

(∀x. p x) ⟶ (∃x. p x)
```

Use "Copy Result to Clipboard" as the proof.

Multiple formulas can be proved in MiniCalc using the following style:

```
# "Formula 1"
...
# "Formula 2"
...
```

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.

2)

Solve exercise 2.8 and exercise 2.9 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.