**User Manual For Logic Proof Tool**

This is a tool that is made in order to help people to write logical proofs. It does not solve logical expression.

This tool has two major parts: Logical Proof, and Text Editor. Many usage examples are present in the example folder. The text editor is very straight-forward, you can write things and save them.

Logical Proof Usage:

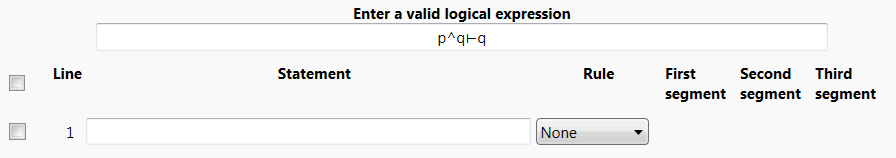
Using the logical proof requires entering a valid logical expression at the text box at the top of the page, which will be referred as the main logical expression. It must contain exactly one ⊢ symbol and to its right a valid logical expression, which is the expression you want to prove. Some examples for a valid main expression:

p^q ⊢ q

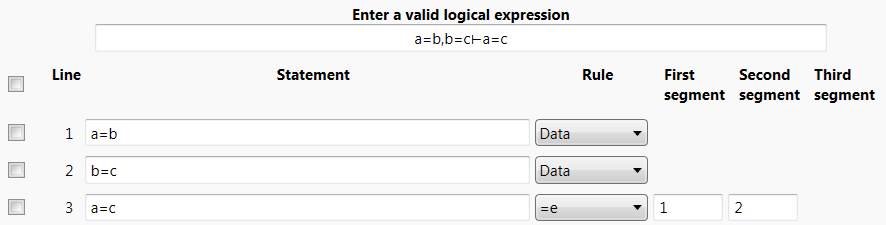
P(t), ∀x(P(x)→¬Q(x)) ⊢ ¬Q(t)

⊢ (q→r) → ((¬q→¬p)→(p→r))

Clicking the "New Line" button will add a new line where you can enter your proof.



Then you can add a statement and pick a rule. After choosing a rule up to 3 segments can show up, in them you write the reasoning for the statement. Instead of commas you just write them in the different segments. For example:



In row 3- Instead of writing "1, 2", write the rows in the different segments.

Another example:



Note that the dash symbol (' – ') does not mean a new segment is needed, only if it were to be a comma.

Clicking the "Check" button will check if the syntax for the proof is valid, and if the thing that was needed to be proven has been achieved.

If you want to add a box just mark two different rows and click the create box button.

It is possible to remove rows by marking them and clicking the remove button

Those symbols are equal:

> →

~ ¬

^∧