

Tactics

Expression	Meaning	Using	Proving
<code>forall</code>	universal quant.	<code>apply, specialize</code>	<code>intros</code>
<code>A -> B</code>	implication	<code>apply, specialize</code>	<code>intros</code>
<code>A /\ B</code>	conjunction	<code>destruct</code>	<code>split</code>
<code>A \/ B</code>	disjunction	<code>destruct</code>	<code>left, right</code>
<code>exists</code>	existential quant.	<code>destruct</code>	<code>exists, eexists</code>
<code>~ P</code>	negation	<code>apply, exfalso</code>	<code>intros</code>
<code>x = y</code>	equality	<code>rewrite, subst,</code> <code>inversion</code>	<code>reflexivity,</code> <code>f_equal,</code> <code>symmetry,</code> <code>transitivity...</code>
<code>x + y</code>	defined function		<code>simpl</code>
<code>n : nat</code>	inductive value	<code>destruct</code>	<code>constructor</code>
<code>m <= n</code>	inductive predicate	<code>inversion,</code> <code>induction</code>	<code>apply,</code> <code>constructor</code>

General tactics:

Command	Usage
<code>simpl</code>	fire computation
<code>assumption</code>	find the goal in the hypotheses
<code>easy</code>	very basic automation; fails if does not prove the goal
<code>now tac</code>	<code>tac</code> followed by <code>easy</code> ; fails if does not prove the goal
<code>auto</code>	extensible proof search

Commands

Command	Usage
<code>Search (_ + _)</code>	Find theorems involving certain patterns
<code>Locate "+"</code>	Find out what a notation stands for
<code>About add</code>	Gives various information about a defined constant (type, implicit arguments...)
<code>Print add</code>	Gives the body of a definition
<code>Check (0 + 0)</code>	Type-checks a term
<code>Compute (0 + 0)</code>	Evaluates a term
<code>Print Assumptions NNPP</code>	Check what axioms a proof relies on