

# heuristic solution

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The *heuristic solution* command is applicable to universal and existential quantification predicates to which the *heuristic decision* command is also applicable. For an existential quantification that is *true*, *heuristic solution* reveals a solution. For a universal quantification that is *false*, *heuristic solution* reveals a counter-example. It effectively uses a *quantification tac* command to reveal the solutions.

In the cases where there is no solution or counter-example, *heuristic solution* reports “*Nothing changed*”.

## 1. Tactic example

*“heuristic solution” “number” p<sub>1</sub> p<sub>2</sub>*

This example applies the *heuristic decision* command to predicates  $p_1$  and  $p_2$ , using the number in the string literal to seed a random number generator to ensure repeatable behaviour.

*“heuristic solution” p<sub>1</sub> p<sub>2</sub>*



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This example applies the *heuristic decision* command to predicates  $p_1$  and  $p_2$ , using a random seed.

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