## Total functional programming in Agda

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## Agenda

1. Warm up

Warm up

## Meet Agda

- Proof assistant
- Dependently-typed functional programming language
- Total (i.e., termination and production checkers)

## Agda timeline in a nutshell

**1969**: Cornelis Vreeswijk releases the song *Hönan Agda*<sup>1</sup>

**1970s** : Martin-Löf intuitionistic type theory in mathematics

**1999**: Catarina Coquand implemented in Haskell the original version of Agda

2007 : Ulf Norell develops Agda 2, with implementation described in his PhD thesis Towards a practical programming language based on dependent type theory

https://lists.chalmers.se/pipermail/agda/2016/008867.html

