

Insertion Sort

October 22, 2020

1 Notes

- Adapded form a persnetation for CS320¹
- Since agda uses a uniary encoing of naturals, the time compexity of this example will be poor. this could be fixed by abstracting over an abitrary order, and using a more effcent representation.
- Other examples of insortion sort in Agda
 - a simpler Agda proof² that uses what I would consider advanced agda feauters and library imports. The proof code is still a decent multiple of the implementation.
 - more complicated but prove that the result is a permutation³

¹<https://github.com/BU-CS320/Spring-2019/blob/master/notes/proof/ProofScratch.agda>

²<https://gist.github.com/aztek/92e6d47bde0d128bcb9d>

³<https://gist.github.com/gallais/5643718>