

# A1: Intro

## Design Document

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## 1 Data structures

- `HashMap<String, Vec<String>>`
  - Key: a `String` representing a fingerprint
  - Value: a `Vec<String>` containing each name associated with that fingerprint

## 2 Invariants

1. Each fingerprint read thus far exists in the `HashMap`.
2. The `Vec` corresponding to each fingerprint contains all of the names read thus far that are associated with that fingerprint.

## 3 Method

To compute the final fingerprint groups, the program will iterate over each fingerprint in the `HashMap`. For each fingerprint, the program will print all of the names in the corresponding `Vec`, one per line, separating each group with a newline.