Stable Matching Report

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Results

Our implementation produces the expected results on all input–output file pairs.

Implementation details

Both the men and women are represented by a human class, where they both store their preferences in a *LinkedHashMap* where Human is the key and and Integer value represent the priority. We can check find a free man who has not proposed to every woman in constant time, because we keep the free men in a list so wee don't need to loop through everyone, we can just take the first in the queue.

With these data structures, our implementation runs in time $O(n^2)$ on inputs with n men and n women.