Password
Cracking

Using AKKA

Caching Approach

- No caching
- Trying to crack multiple hints at once
- Using HashSets, HashMaps wherever possible for quick lookup

Protocol Setup

- Reader (sends batch) → Master
- Worker (free message) → Registers to master
- Master assigns tasks (hints, password) → Workers
- Worker (task done message) → Master
- Master sends cracked passwords → Collector
  - Reader (sends new batch) → Master

Challenges

- Workload permutations

- Worker to workload binding

- Workload distribution from master to workers

Solutions

- Universe

- universeWorker Hashmap

- tasksPipe with different workloads (CrackHintMessage, StartCrackingMessage, CrackPasswordMessage)