



# Password Cracking

Using AKKA

# Caching Approach

- No caching
- Trying to crack multiple hints at once
- Using HashSets, HashMaps were ever 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)