Master System Reaper Slave System When all other Reader Collector Reaper actors are down reads input data shuts down system When all other Print cracked and sends it to passwords actors are down Master shuts down system Reaper Slave System Master When all other - starts reader actors are down - takes input and information for workers to solve work (hint shuts down system hashmap, password length and sends it to registered workers - creates work stack to solve hints, assigns work to idle workers - take solved hints and push passwords to crack on work stack Reaper if enough hints are solved Slave System - If all passwords are solved send them to collector When all other send Poisen Pills to all other actors and at last to oneself actors are down shuts down system Workers register and get hint hashmap and password length Workers solve work packages and send results to master - register and get hint hashmap and password length - 1. phase crack hints - solve work packages and send results to master - 2. phase crack passwords - 1. phase crack hints - 2. phase crack passwords