Program

- ProgramID : String
- name : String
- quota : int
- rol : int[]
- matchedResidents : ArrayList<Resident>

+ set ROL() : void
+ get quota() : int
+ get filledPositions() : int
+ get programID() : String
+ member(int) : bool
+ rank() : int
+ leastPreffered() : Resident
+ AddResident(resident) : bool
+ toString() : String

Resident

Gale Shapley

1

Resident

- Resident ID : int
- first name : string
- last name : string
- RoL : string[]
- Matched program : Program
- Matched rank : int
- Next proposal Index : int

+ set RoL (string[]) : void
+ get first name() : String
+ set last name() : string
+ get matched program() : Program
+ is matched () : Bool
+ get matched rank() int
+ match (Program, int) : void
+ un match () : void
+ get ID () : int
+ to string() : string

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- residents = Hash map<int, Resident>
- Programs = Hash map<String, Program>

- **main** () : void

- read Residents (String) : void

- read Programs (String) : void

- GaleShaplex Algo() : void

- print final Results (String) : void