

מסדי נתונים - תרגיל בית 2.

מגישים: תומר זילברמן (326063047) ורון סנדרוביץ' (215019803).

members (uid, name, occupation, birthPlace, gender, educatedAt, language, birthYear)
knessets (number, startYear, endYear)
memberInKnesset (number, uid, party)

.1

$\pi_{name}(\sigma_{educatedAt = "Hebrew University of Jerusalem" \wedge birthYear > 1970}(members))$

.2

$\pi_{name, party}(\sigma_{number = 1}(members \bowtie memberInKnesset))$

.3

$\pi_{name, number}(\sigma_{startYear - birthYear > 70 \wedge (party = "Likud" \vee party = "Meretz")}(members \bowtie memberInKnesset \bowtie knessets))$

.4

$\pi_{name}(\sigma_{occupation \neq "politician" \wedge gender = "female" \wedge number = 23}(members \bowtie memberInKnesset) \cap \sigma_{occupation \neq "politician" \wedge gender = "female" \wedge number = 24}(members \bowtie memberInKnesset))$

.5

$\pi_{name}((\pi_{uid}(memberInKnesset) - \pi_{uid} \sigma_{first.num1 \neq second.num2}(\rho_{first(num1, uid, party1)}(memberInKnesset) \bowtie \rho_{second(num2, uid, party2)}(memberInKnesset)))) \bowtie \sigma_{birthPlace = "Jerusalem"}(members))$

.6

$\pi_{name} members \bowtie (\sigma_{party = "Mapai"}(memberInKnesset) \div \pi_{number} \sigma_{party = "Mapai" \wedge name = "David Ben Gurion"}(memberInKnesset \bowtie members))$

.7

$\pi_{number, name}(members \bowtie (\pi_{numbers, uid}(memberInKnesset) - (\pi_{number, uid} \sigma_{birthYear > otherBirthYear}(\rho_{memberInKnesset(number, uid, birthYear)}(\pi_{number, uid, birthYear}(members \bowtie memberInKnesset)) \bowtie \rho_{otherMemberInKnesset(number, otherUid, otherBirthYear)} \pi_{number, uid, birthYear}(members \bowtie memberInKnesset))))))$