

Question 4 Details (Output can be seen in Question 4.txt. thanks).

① ? exist(P), dateof birth(P, date(—, —, Y)), Y < 1963, salary(P, Salary), Salary < 15000.

this means if there exist a person P whose date of birth < 1963 and Salary < 15000.

this person can be father, mother, or child in the family.

So system will check from first family to last family with the condition Salary < 15000 and Y < 1963.

② ? exist(P), dateof birth(P, date(—, —, Y)), !, Y < 1998, salary(P, Salary), Salary < 20000.

Same situation as in ① but with a cut "!" which means system will find the first person who date of birth < 1998 and Salary < 20000, then it will stop to find next one.

So the output is only one person.

③ write(Person(GivenName, FamilyName, —, works(—, —))).

this means find the wives in the data base who is still work, and output their Given name and Family name.

Wife is the second person in the family.

System will check the database with the condition works(—, —).

there are 4 people.

④ child(X), dateof birth(X, date(—, —, 1983)).

this means to find all the children who was born in 1983.

System will check the database with the condition X is a child and X's date of birth with year 1983.

There are 5 people.