

examples Program

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3 % First generation
4 member(abdullah_sr, male).
5 member(amina_sr, female).
6
7 % Second generation (children of abdullah_sr and amina_sr)
8 member(ahmed_jr, male) :- parent(abdullah_sr, ahmed_jr), parent(amina_sr, ahmed_jr).
9 member(fatima, female) :- parent(abdullah_sr, fatima), parent(amina_sr, fatima).
10 member(ali, male) :- parent(abdullah_sr, ali), parent(amina_sr, ali).
11 member(khadijah, female) :- parent(abdullah_sr, khadijah), parent(amina_sr, khadijah).
12
13 % Third generation (grandchildren of abdullah_sr and amina_sr)
14 member(mohamed, male) :- parent(ahmed_jr, mohamed), parent(aisha, mohamed).
15 member(sara, female) :- parent(ahmed_jr, sara), parent(aisha, sara).
16 member(ibrahim, male) :- parent(ali, ibrahim), parent(zainab, ibrahim).
17 member(amina_jr, female) :- parent(ali, amina_jr), parent(zainab, amina_jr).
18 member(hassan, male) :- parent(khadijah, hassan), parent(hussein, hassan).
19 member(hussein_jr, male) :- parent(khadijah, hussein_jr), parent(hussein, hussein_jr).
20
21 % Fourth generation (great-grandchildren of abdullah_sr and amina_sr)
22 member(abdullah_iv, male) :- parent(mohamed, abdullah_iv), parent(sarah, abdullah_iv).
23 member(aisha_jr, female) :- parent(mohamed, aisha_jr), parent(sarah, aisha_jr).
24 member(zainab_jr, female) :- parent(ibrahim, zainab_jr), parent(ali_jr, zainab_jr).
25 member(ali_iv, male) :- parent(ibrahim, ali_iv), parent(ali_jr, ali_iv).
26 member(khadijah_jr, female) :- parent(hassan, khadijah_jr), parent(fatima_jr, khadijah_jr).
27 member(fatima_iv, female) :- parent(hussein_jr, fatima_iv), parent(amina_iii, fatima_iv).
28
29 % Define parent/child relationships
30 parent(abdullah_sr, ahmed_jr).
31 parent(amina_sr, ahmed_jr).
32 parent(abdullah_sr, fatima).
33 parent(amina_sr, fatima).
34 parent(abdullah_sr, ali).
35 parent(amina_sr, ali).
36 parent(abdullah_sr, khadijah).
37 parent(amina_sr, khadijah).

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mother(X, mohamed).

X = aisha

father(X, khadijah_jr).

X = hassan

Next 10 100 1,000 Stop

father(X, khadijah_jr).

X = hassan

Next 10 100 1,000 Stop

sibling(amina_jr, Y).

Y = ibrahim

Next 10 100 1,000 Stop

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Examples History Solutions