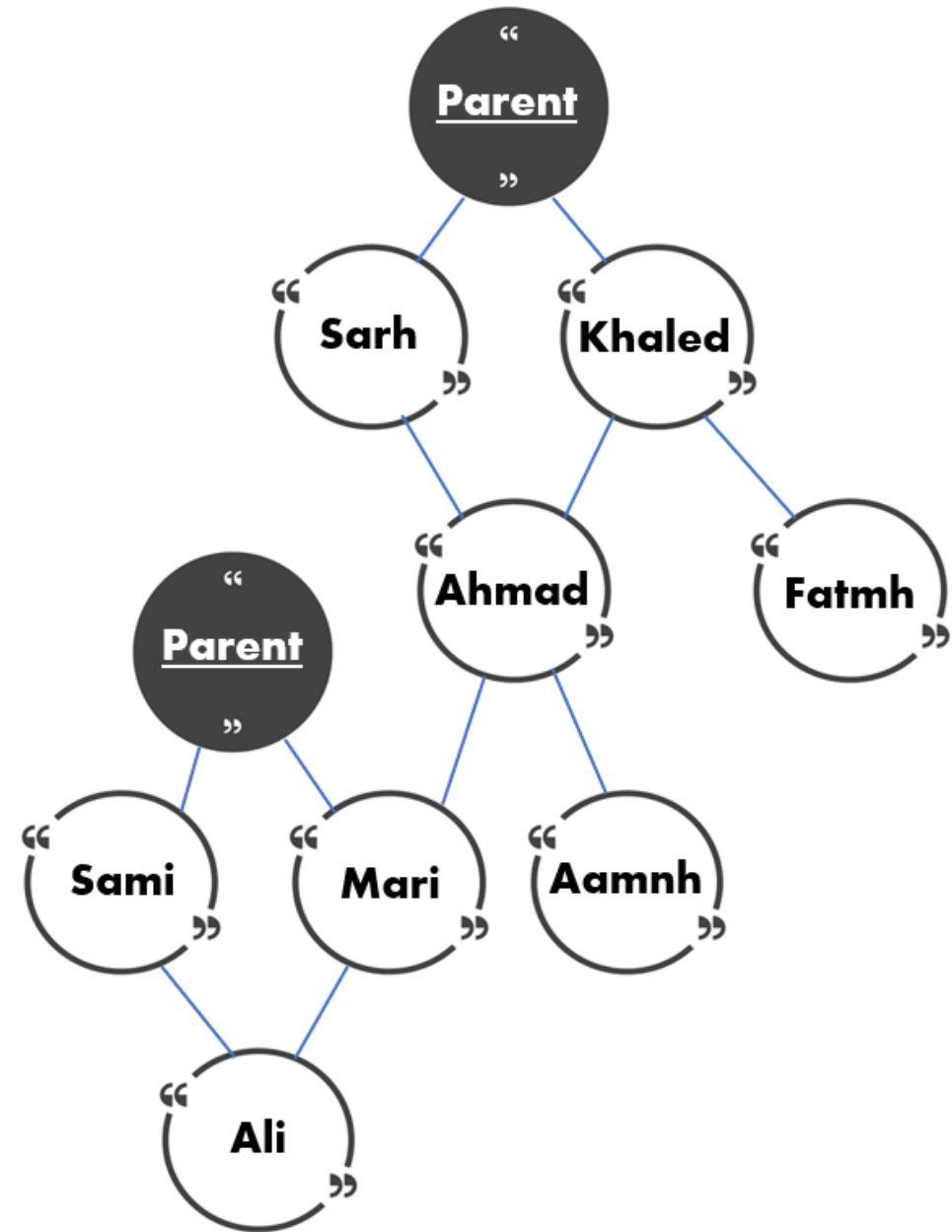


# Family Relationships by Using Prolog Language



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```

1 male(ali) .
2 male(ahmad) .
3 male(khaled) .
4 male(sami) .
5
6 female(sarh) .
7 female(fatmh) .
8 female(mari) .
9 female(aamnh) .
10
11 parent(sarh,ahmad) .
12 parent(khaled,ahmad) .
13 parent(khaled,fatmh) .
14 parent(ahmad,aamnh) .
15 parent(ahmad,mari) .
16 parent(mari,ali) .
17 parent(ahmad,aamnh) .
18 parent(sami,ali) .
19
20 mother(X,Y):-parent(X,Y),female(X) .
21 father(X,Y):-parent(X,Y),male(X) .
22 sister(X,Y):-parent(Z,X),parent(Z,Y),female(X),X\==Y.
23 brother(X,Y):-parent(Z,X),parent(Z,Y),male(X),X\==Y.
24
25 grandParent(X,Y):-parent(X,Z),parent(Z,Y) .
26 grandFather(X,Z):-father(X,Y),parent(Y,Z) .
27 grandMother(X,Z):-mother(X,Y),parent(Y,Z) .
28
29 wife(X,Y):-parent(X,Z),parent(Y,Z),male(Y),female(X) .

```

father(X,Y).

X	Y	
khaled	ahmad	1
khaled	fatmh	2
ahmad	aamnh	3
ahmad	mari	4
ahmad	aamnh	5
sami	ali	6

mother(X,Y).

X	Y	
sarh	ahmad	1
mari	ali	2

false

sister(X,Y).

X	Y	
fatmh	ahmad	1
aamnh	mari	2
mari	aamnh	3
mari	aamnh	4
aamnh	mari	5

false

brother(X,Y).

X	Y	
ahmad	fatmh	1

false

```

1 male(ali) .
2 male(ahmad) .
3 male(khaled) .
4 male(sami) .
5
6 female(sarh) .
7 female(fatmh) .
8 female(mari) .
9 female(aamnh) .
10
11 parent(sarh,ahmad) .
12 parent(khaled,ahmad) .
13 parent(khaled,fatmh) .
14 parent(ahmad,aamnh) .
15 parent(ahmad,mari) .
16 parent(mari,ali) .
17 parent(ahmad,aamnh) .
18 parent(sami,ali) .
19
20 mother(X,Y):-parent(X,Y),female(X) .
21 father(X,Y):-parent(X,Y),male(X) .
22 sister(X,Y):-parent(Z,X),parent(Z,Y),female(X),X\==Y.
23 brother(X,Y):-parent(Z,X),parent(Z,Y),male(X),X\==Y.
24
25 grandParent(X,Y):-parent(X,Z),parent(Z,Y) .
26 grandFather(X,Z):-father(X,Y),parent(Y,Z) .
27 grandMother(X,Z):-mother(X,Y),parent(Y,Z) .
28
29 wife(X,Y):-parent(X,Z),parent(Y,Z),male(Y),female(X) .

```

grandParent(X,Y).

X	Y	
sarh	aamnh	1
sarh	mari	2
sarh	aamnh	3
khaled	aamnh	4
khaled	mari	5
khaled	aamnh	6
ahmad	ali	7

false

grandFather(X,Z).

X	Z	
khaled	aamnh	1
khaled	mari	2
khaled	aamnh	3
ahmad	ali	4

false

wife(X,Y).

X	Y	
sarh	khaled	1
mari	sami	2

false