

Code:

% Facts: Define the relationships in the family tree

parent(john, bob).

parent(john, lisa).

parent(mary, bob).

parent(mary, lisa).

parent(bob, tom).

parent(bob, ann).

parent(lisa, patrick).

parent(lisa, emily).

% Rules: Define other relationships based on the facts

father(Father, Child) :-

parent(Father, Child),

male(Father).

mother(Mother, Child) :-

parent(Mother, Child),

female(Mother).

% Define the gender

male(john).

male(bob).

male(tom).

male(patrick).

female(mary).

female(lisa).

female(ann).

female(emily).

% Define siblings

siblings(X, Y) :-

parent(Z, X),

parent(Z, Y),

$X \neq Y$.

% Define grandparents

grandparent(Grandparent, Grandchild) :-

parent(Grandparent, Parent),

parent(Parent, Grandchild).

Output:

```

father(john, Child).
Child = bob
Child = lisa

```

```

?- father(john, Child).

```

```

siblings(bob, lisa).
true

```

```

?- siblings(bob, lisa).

```

```

grandparent(Grandparent, patrick).
Grandparent = john
Grandparent = mary

```

```

?- grandparent(Grandparent, patrick).

```

```

male(Person).
Person = john
Person = bob
Person = tom
Person = patrick

```

```

?- male(Person).

```

```

siblings(X, Y).
X = bob,
Y = lisa
X = lisa,
Y = bob
X = bob,
Y = lisa
X = lisa,
Y = bob
X = tom,
Y = ann
X = ann,
Y = tom
X = patrick,
Y = emily
X = emily,
Y = patrick

```

```

?- siblings(X, Y).

```