

INPUT 1:

```
(format t "Test 1 Result: ~a~%"  
        (prolog-prove  
          '(((("father" "jim" "jill"))  
              ((("mother" "mary" "jill"))  
                ('(("parent" "X" "jill")))))
```

OUTPUT 1:

```
Test 1 Result: ((X mary)) (X jim))
```

INPUT 2:

```
(format t "Test 2 Result: ~a~%"  
        (prolog-prove  
          '(((("sibling" "jane" "jim"))  
              ((("father" "jim" "jill"))  
                ('(("aunt" "X" "jill")))))
```

OUTPUT 2:

```
Test 2 Result: ((X jane))
```

INPUT 3:

```
(format t "Test 3 Result: ~a~%"  
        (prolog-prove  
          '(((("father" "bob" "jill"))  
              ((("mother" "mary" "jill"))  
                ((("sibling" "samm" "bob"))  
                  ((("uncle" "X" "Y") "<" ("sibling" "X" "Z") ("parent" "Z" "Y"))))  
                ('(("uncle" "X" "jill")))))
```

OUTPUT 3:

Test 3 Result: (((X samm)))

INPUT 4 and 5:

```
(let (
  (axioms '(
    ("father" "jim" "jill")
    ("mother" "mary" "jill")
    ("father" "samm" "jim")
    ("ancestor" "X" "Y") "<" ("parent" "X" "Y")
    ("ancestor" "X" "Y") "<" ("ancestor" "X" "Z") ("ancestor" "Z" "Y")
    ("parent" "X" "Y") "<" ("mother" "X" "Y")
    ("parent" "X" "Y") "<" ("father" "X" "Y"))))
  (query1 '("ancestor" "X" "jill"))
  (query2 '("ancestor" "X" "jill") ("mother" "X" "bob"))))
```

OUTPUT 4 and 5:

```
Test 4 Result (Query1): (((X samm)) (X mary) (X jim))
Test 5 Result (Query2): (((X samm)) (X mary) (X jim))
```