

Logic Programming

Assume we have facts for the predicates:

```
human(john) .  
human(paul) .  
human(mary) .  
  
male(john) .  
male(paul) .  
  
female(mary) .  
  
father(john,mary) .  
  
mother(mary,paul) .
```

Exercise

Write Horn clauses defining the following predicates with the given meaning.

- a) **man (X)** A man is a human who is male
 woman (X) A woman is a human who is female
- b) **parent (X, Y)** X is the parent of Y if it is either the father or the mother of Y
- c) **ancestor (X, Y)** An ancestor is a parent or
 an ancestor is an ancestor of a parent