

# PROLOG EXERCISE

## 1. Given some facts as follow:

```
has(jack, apples) .  
has(ann, plums) .  
has(ann, apples) .  
has(dan, money) .  
fruit(apples) .  
fruit(plums) .
```

Write prolog command to find:

- a. What does Jack have?
- b. Does Jack have something?
- c. Who have both apples and plums?
- d. Does someone have apples and plums?
- e. Does Dan have fruit?
- f. Does someone have something else? Who is it?

## 2. Given some facts as follow:

male(tom) .	parent(pam, bob) .
male(bob) .	parent(tom, bob) .
male(jim) .	parent(tom, liz) .
female(liz) .	parent(bob, ann) .
female(pat) .	parent(bob, pat) .
female(ann) .	parent(pat, jim) .
female(pam) .	

Write prolog command to find:

- a. Father of someone.
- b. Mother of someone.
- c. Grandparent of someone.
- d. Sister of someone.

## 3. Write a prolog program compute the factorial of an input number.

## 4. Write a prolog program find the last element of a list.