- 1. Write a hello world program in prolog.
- 2. Represent the following facts in prolog.
  - a. Tom is a cat
  - b. Kunal loves to eat Pasta
  - c. Hair is black
  - d. Nawaz loves to play games
  - e. Pratyusha is lazy.
  - f. Lili dances.
  - g. Tom is searching for food.
  - h. Jack loves to play cricket.
  - i. Bili loves to play cricket.
  - j. Ryan is free.
- 3. Represent the following relations in prolog along with the facts from Q. no. 2.
  - a. Lili is happy if she dances.
  - b. Tom is hungry if he is searching for food.
  - c. Jack and Bili are friends if both of them love to play cricket.
  - d. Ryan will go to play if school is closed, and he is free.

## And make queries to see

- Is tom a cat?
- Does Kunal love to eat pasta?
- Is Lili happy?
- Will Ryan go to play?
- 4. Implement the knowledge base of the following family tree and write rules for determining mother, sister, father, grand father, grandmother, grand parent, uncle, wife and husband.

