**1.Write a program in Prolog to create simple knowledge base and query over it.**

% Facts: parent(X, Y) means X is a parent of Y

parent(john, mary).

parent(john, luke).

parent(sarah, mary).

parent(sarah, luke).

% Rules: sibling(X, Y) means X and Y are siblings if they have the same parent

sibling(X, Y) :-

parent(Z, X),

parent(Z, Y),

X \= Y.

% Additional facts (optional): gender(X, G) specifies the gender of person X

gender(john, male).

gender(luke, male).

gender(sarah, female).

gender(mary, female).