**PRACTICAL-8**

**AIM:** Implement a Family Tree and define the following predicates:

i. parent(X,Y)

ii. father(X,Y)

iii. mother(X,Y)

iv. sister(X,Y)

v. brother(X,Y)

vi. grandfather(X,Y)

vii. grandmother(X,Y)

**Source Code:**

male(person1).

male(person2).

male(person4).

male(person6).

female(person3).

female(person5).

parent(person1, person2).

parent(person1, person4).

parent(person2, person5).

parent(person3, person5).

parent(person6, person4).

father(X, Y) :- parent(X, Y), male(X).

mother(X, Y) :- parent(X, Y), female(X).

sister(X, Y) :- female(X), parent(Z, X), parent(Z, Y), X \= Y.

brother(X, Y) :- male(X), parent(Z, X), parent(Z, Y), X \= Y.

grandfather(X, Y) :- father(X, Z), parent(Z, Y).

grandmother(X, Y) :- mother(X, Z), parent(Z, Y).

**Output:**

