# Assignment 1

# Write a program in PROLOG to implement a family tree

female(pam).

female(liz).

female(ann).

female(pat).

male(tom).

male(bob).

male(jim).

parent(pam,bob).

parent(tom,bob).

parent(tom,liz).

parent(bob,ann).

parent(bob,pat).

parent(pat,jim).

offspring(X,Y):-parent(Y,X).

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

grandparent(X,Y):-parent(Z,Y),parent(X,Z).

grandchild(X,Y):-grandparent(Y,X).

different(X,Y):-X\=Y.

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

predecessor(X,Y):-parent(X,Y).

predecessor(X,Y):-parent(Z,Y),predecessor(X,Z).

**Output**

