**Q1. Edges and Nodes**

edge(a,b).

edge(a,e).

edge(b,d).

edge(b,c).

edge(c,a).

edge(e,b).

edge(X,Y) :- tedge(X,Y).

tedge(Node1,Node2) :-

edge(Node1,SomeNode),

edge(SomeNode,Node2).

**Q2. Dijkstra's Algorithm**

edge(a,b).

edge(a,e).

edge(b,d).

edge(b,c).

edge(c,a).

edge(e,b).

tedge(Node1,Node2) :-

edge(Node1,SomeNode),

edge(SomeNode,Node2).

path(Node1,Node2) :-

edge(Node1,Node2).

path(Node1,Node2) :-

edge(Node1,SomeNode),

path(SomeNode,Node2).

**Q3. Family Tree**

male(jerry).

male(stuart).

male(warren).

female(kathe).

female(maryalice).

brother(jerry,stuart).

brother(jerry,kathe).

sister(kather,jerry).

parent\_of(warren,jerry).

parent\_of(maryalice,jerry).