



















Experiment No. 9

Program Code –

```
% Facts
father(nitin, niraj).
father(nitin, isha).
father(shrikant, nitin).
father(shrikant, suhas).
father(sitaram, shrikant).
father(suhas, sujal).
father(suhas, sagarika).
mother(nidhi, niraj).
mother(nidhi, isha).
brother(niraj, isha).
brother(suhas, nitin).
sister(isha, niraj).
wife(nidhi, nitin).
wife(suvidha, suhas).

% Rules
parent(X, Y) :- father(X, Y).
grandparent(X, Y) :- parent(X, Z), parent(Z, Y).
greatgrandparent(X, Y) :- grandparent(X, Z), parent(Z, Y).
siblings(X, Y) :- brother(X, Y), sister(Y, X).
```

Output –

 <code>siblings(niraj, isha).</code>	 
<code>true</code>	<code>1</code>
 <code>greatgrandparent(sitaram, niraj).</code>	 
<code>true</code>	<code>1</code>
 <code>greatgrandparent(sitaram, sagarika).</code>	 
<code>true</code>	<code>1</code>
 <code>grandparent(sitaram, suhas).</code>	 
<code>true</code>	<code>1</code>
 <code>grandparent(shrikant, sujal).</code>	 
<code>true</code>	<code>1</code>
 <code>wife(nidhi, nitin).</code>	 
<code>true</code>	<code>1</code>