**ARTIFICIAL INTELLIGENCE**

**Assignment 2:**

Q1> Following facts are given.

%parent(X): X is a parent of Y

parent(hank,ben).

parent(hank,denise).

parent(irene,ben).

parent(irene,denise).

parent(alice,carl).

parent(ben,carl).

parent(denise,frank).

parent(denise,gary).

parent(celina,frank).

parent(celina,gary).

parent(gary,john).

parent(rose,john).

Write the rules to show/check and find the answer.

1. Check whether hank is a parent of denise.
2. Check whether denise is a parent of john.
3. Check whether Irene is a grandparent of frank.
4. Who are the children of hank?
5. Who are the grandparents of carl?
6. Check whether hank is an ancestor of celina.
7. Check whether irene is an ancestor of john.
8. Find all the ancestors of frank?
9. Find all the descendants of denise?

Q2>

elephant is bigger than horse.

horse is bigger than donkey.

donkey is bigger than dog.

dog is bigger than cat.

cat is bigger than rat.

Write the rules to show and find the answer.

1. Show that horse is bigger than rat.
2. Show that elephant is bigger than dog.
3. Find the animals those are bigger than dog.
4. Find the biggest animal.
5. Find the smallest animal.