**LAB-10**

**PRELAB:**

1. Write a short note on Knowledge Based agent with its architecture and write the two functions of Knowledge Based agent. Write a simple algorithm on its functionality.

2. State and explain about forward chaining with an example.

**IN LAB:**

1. Write a python code for the following inference rules and facts such that the inference engine generates a list. Implement the code using Forward Chaining.

Seed(A) ==> Plant(A).

Plant(A) ==> Fruit(A).

Plant(A),Eating(A) ==> Human(A).

Plant("Mango").

Eating("Mango").

Seed("Sprouts").

**POST LAB:**

1. Translating English into first order logic

1. Every gal in Constantinople lives in Istanbul, not Constantinople.

2. Every new beginning comes from some other beginning end.

2.

a) Apply backward chaining and prove that Gita loves Kurtis.

b) Derive forward chaining using the given known facts to prove Tony is blue.

* Tony barks.
* Tony eats bone.