**Lab Session 2: Knowledge Representation and Semantic Network**

**Exercises:**

**OBJECT: Learning how to create facts from the given information and their pictorial representation using semantic network**

**Create facts from the following information:**

Joe is male.

Male (Joe)

Pat is male.

Male (Pat)

Sharon is female.

Female (Sharon)

Mary is female.

Female (Mary)

Joe is the father of Mary.

F/O (Mary)

Sharon is the mother of Mary.

M/O (Sharon)

Joe is married to Sharon.

W/O (Sharon)

**Create Facts from following scenario.**

**Steve Jobs**, the American businessman and technology visionary who is best known as the co-founder, chairman, and chief executive officer of *Apple Inc*, was born on February 24, 1955.One of Steve Jobs' biggest hobby ever was calligraphy. He liked it so much that he dropped out of college to pursue it as he found it useless to pay for something he did not enjoy, and this was the hobby which gave the Macs the characteristic fonts it had. Steve Devoted his whole life for Apple and that was his passion and job. Apart from this, he's interested in music and travel.

Businessman (Steve jobs)

Cofounder (appleinc)

Chairman (appleinc)

Chiefexecutiveofficer (apple)

Born (twentyfourfebruaryninefiftyfive)

Hobby (calligraphy)

Interested (music)

Interested (travel)

**Draw semantic network of the following:**

1. a\_kind\_of(enterprise, ship).

a\_kind\_of(kennedy,ship).

part\_of(enterprise,u\_s\_navy).

part\_of(kennedy,u\_s\_navy).

part\_of(u\_s\_navy,u\_s\_government).

a\_kind\_of(u\_s\_government,government).

color(ship,gray).

has(u\_s\_government,civil\_service\_system).

Ship

Vehicle

Grey

Enterprise

Enterprise

U.S navy

U.S navy

U.S navy

1. is a (Bird, Vertebrate)

is a (Blue Bird, Bird)

has covering (Bird, feathers)

has property (Bird, flies)

has size (Blue Bird, small)

has color (Blue Bird, blue)

**Feathers**

**Vertebrate**

**Bird**

**Small**

**Blue**

**Flies**

1. Mammal is an Animal

Mammal has Vertebra

Cat is a Mammal

Cat has Fur

Bear is a Mammal

Bear has Fur

Whale is a Mammal

Whale lives in Water

Fish is an Animal

Fish lives in Water

**Animal**

**Mammals**

**Fish**

**Cat**

**Vertebra**

**Water**

**Whale**

**Bear**

**Fur**

**Water**

**Fur**

**Whale**

**Cat**

**Cat**