Name: Purushottam Tiwari
Roll no.: 19074029
Branch: CSE(IDD)
Course: CSE-241

Exercise-5.2

Ques: Do we need an ontology if we have a frame graph?

Ans:
Ontology: These are formal complex definitions of vocabularies which allow us to define complex structures and new relationships between vocabulary terms and members of class and different members of classes that we define. It is a way of showing the properties of a subject area and their relationships, by defining a set of concepts and categories that represent the subject.
Frames: Frames are the AI data structure which divides knowledge into substructure. It consists of a collection of slots and slot values. Slots have names and values which are called facets. These slots can be of any type and sizes. Frames system consist of a collection of frames which are connected.

For example if we consider a this statement: Banana is a yellow colored fruit.

It's frame representation would be:

Slot	FILTER
Entity	Banana
Color	Yellow
Category	Fruit

In most general cases frame graphs are self sufficient. Facets are features of frames which enable us to put constraints on the frames. When we need to extract information from the frame we can simply search for the particular facet. Therefore there is no need to create an ontology and define a separate relation of that property with frame title.

For example consider information of employee XYZ:

SLOT	FILTER
Name	XYZ
Employee Id	4227
Post	Manager
Address	ABC
Mob No.:	1424285463

Now if we want to search for Post of XYZ, it’s simple enough to search for facet “Post” in slots. There is no need of ontology.