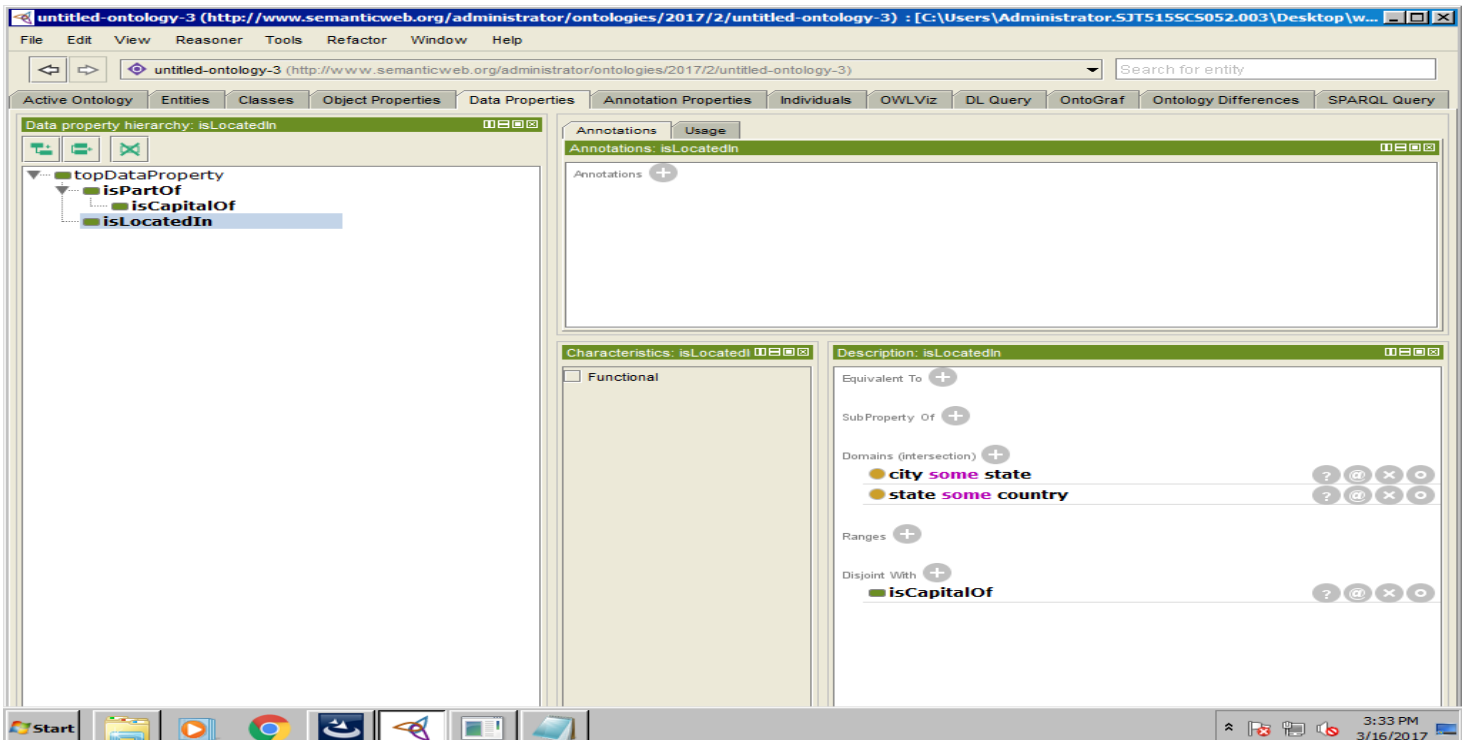
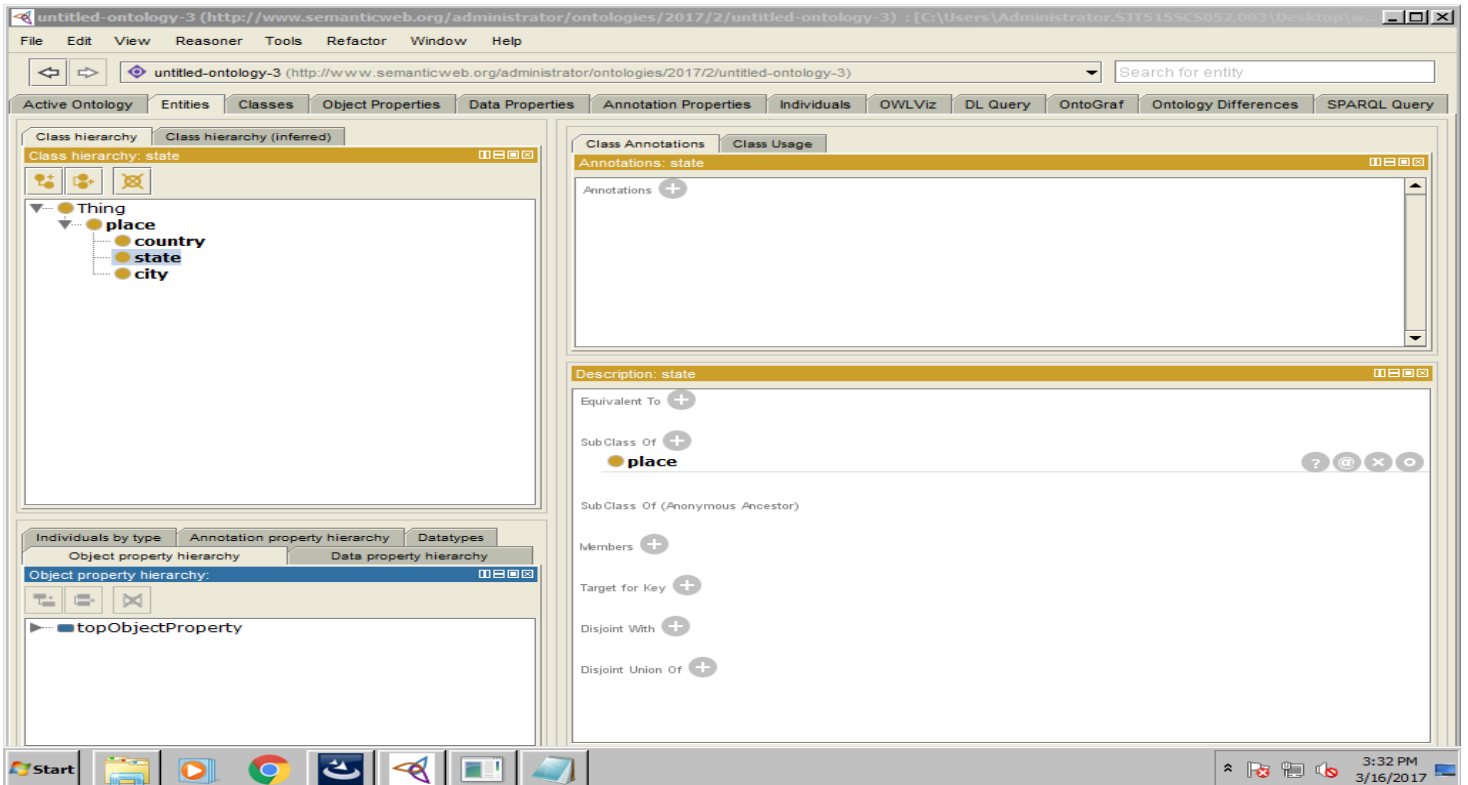
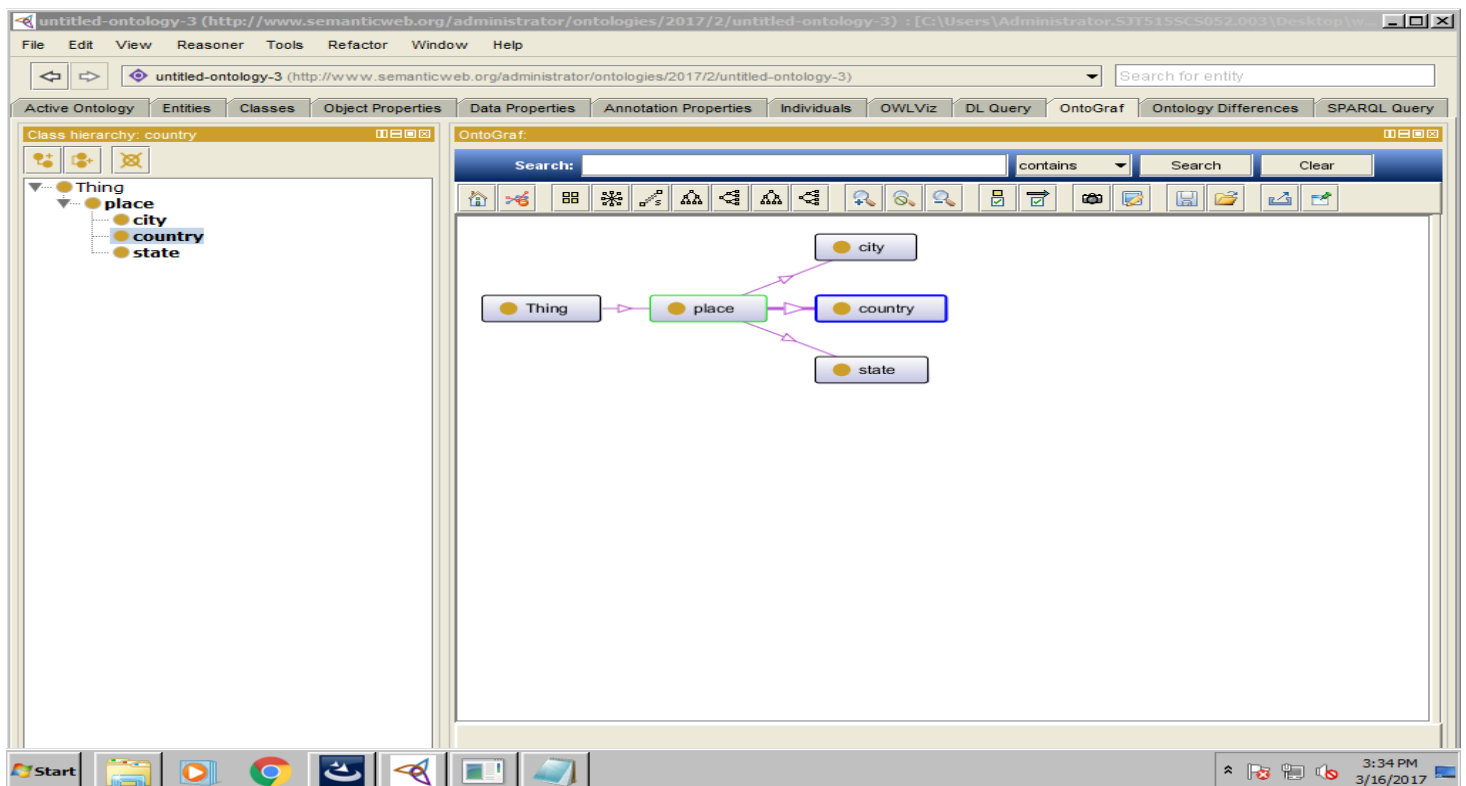


Exercise 5: Creating OWL Ontology using Protege editor

16MCS0051





```
<?xml version="1.0"?>
```

```
<!DOCTYPE Ontology [
```

```
  <!ENTITY xsd "http://www.w3.org/2001/XMLSchema#" >
```

```
  <!ENTITY xml "http://www.w3.org/XML/1998/namespace" >
```

```
  <!ENTITY rdfs "http://www.w3.org/2000/01/rdf-schema#" >
```

```
  <!ENTITY rdf "http://www.w3.org/1999/02/22-rdf-syntax-ns#" >
```



```
<Ontology xmlns="http://www.w3.org/2002/07/owl#">
```

```
  xml:base="http://www.semanticweb.org/administrator/ontologies/2017/2/untitled-ontology-3"
```

```
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#">
```

```
  xmlns:xsd="http://www.w3.org/2001/XMLSchema#">
```

```
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
```

```
  xmlns:xml="http://www.w3.org/XML/1998/namespace">
```

```
  ontologyIRI="http://www.semanticweb.org/administrator/ontologies/2017/2/untitled-ontology-3">
```

<Prefix name="rdf" IRI="http://www.w3.org/1999/02/22-rdf-syntax-ns#"/>

<Prefix name="rdfs" IRI="http://www.w3.org/2000/01/rdf-schema#"/>

<Prefix name="xsd" IRI="http://www.w3.org/2001/XMLSchema#"/>

<Prefix name="owl" IRI="http://www.w3.org/2002/07/owl#"/>

<Declaration>

<Class IRI="#city"/>

</Declaration>

<Declaration>

<Class IRI="#country"/>

</Declaration>

<Declaration>

<Class IRI="#place"/>

</Declaration>

<Declaration>

<Class IRI="#state"/>

</Declaration>

<Declaration>

<ObjectProperty IRI="#city"/>

</Declaration>

<Declaration>

<ObjectProperty IRI="#country"/>

</Declaration>

<Declaration>

<ObjectProperty IRI="#state"/>

</Declaration>

<Declaration>

<DataProperty IRI="#isCapitalOf"/>

</Declaration>

<Declaration>

<DataProperty IRI="#isLocatedIn"/>

</Declaration>

<Declaration>

<DataProperty IRI="#isPartOf"/>

</Declaration>

<SubClassOf>

<Class IRI="#city"/>

<Class IRI="#place"/>

</SubClassOf>

<SubClassOf>

<Class IRI="#country"/>

<Class IRI="#place"/>

</SubClassOf>

<SubClassOf>

<Class IRI="#state"/>

<Class IRI="#place"/>

</SubClassOf>

<SubDataPropertyOf>

<DataProperty IRI="#isCapitalOf"/>

<DataProperty IRI="#isPartOf"/>

</SubDataPropertyOf>

<FunctionalDataProperty>

<DataProperty IRI="#isPartOf"/>

</FunctionalDataProperty>

<DataPropertyDomain>

<DataProperty IRI="#isCapitalOf"/>

<ObjectSomeValuesFrom>

```
<ObjectProperty IRI="#city"/>
<Class IRI="#state"/>
</ObjectSomeValuesFrom>
</DataPropertyDomain>
<DataPropertyDomain>
  <DataProperty IRI="#isLocatedIn"/>
  <ObjectSomeValuesFrom>
    <ObjectProperty IRI="#city"/>
    <Class IRI="#state"/>
  </ObjectSomeValuesFrom>
</DataPropertyDomain>
<DataPropertyDomain>
  <DataProperty IRI="#isLocatedIn"/>
  <ObjectSomeValuesFrom>
    <ObjectProperty IRI="#state"/>
    <Class IRI="#country"/>
  </ObjectSomeValuesFrom>
</DataPropertyDomain>
<DataPropertyDomain>
  <DataProperty IRI="#isPartOf"/>
  <ObjectSomeValuesFrom>
    <ObjectProperty IRI="#city"/>
    <Class IRI="#state"/>
  </ObjectSomeValuesFrom>
</DataPropertyDomain>
<DataPropertyDomain>
  <DataProperty IRI="#isPartOf"/>
  <ObjectSomeValuesFrom>
```

```
<ObjectProperty IRI="#state"/>

<Class IRI="#country"/>

</ObjectSomeValuesFrom>

</DataPropertyDomain>

<DisjointDataProperties>

  <DataProperty IRI="#isCapitalOf"/>

  <DataProperty IRI="#isLocatedIn"/>

</DisjointDataProperties>

<DisjointDataProperties>

  <DataProperty IRI="#isCapitalOf"/>

  <DataProperty IRI="#isPartOf"/>

</DisjointDataProperties>

</Ontology>

<!-- Generated by the OWL API (version 3.4.2) http://owlapi.sourceforge.net -->
```