

```

:label      rdf:type      owl:AnnotationProperty .
            rdfs:range    rdf:PlainLiteral .
            rdfs:subPropertyOf rdf:label

```

```

:Apartment  :label      "Apartment"@en,
                "Appartement"@nl,
                "Διαμέρισμα"@el .

```

There are a couple of things going on in the above example. We first define the `:label` property to be of type `owl:AnnotationProperty` with a range of `rdf:PlainLiteral`. This is a special RDF datatype for natural language text – that is, plain literals can have a language tag. We furthermore define the `:label` property to be a subproperty of `rdf:label`, and then give three labels to the `:Apartment` class in English, Dutch, and Greek.

In the general case, annotation properties will have literal values, but they may be used to relate non-literal resources as well.

Top and Bottom Properties All object properties in OWL2 are a subproperty of `owl:topObjectProperty`. This property is defined as the property that relates *all* individuals in the ontology. Conversely, `owl:bottomObjectProperty` is the property that relates *no* individuals. Similarly, `owl:topDataProperty` relates all individuals to any possible literal value, and `owl:bottomDataProperty` relates no individual to any literal value.

Transitive Properties From the discussion of `rdfs:subClassOf` we know that this relation is *transitive*; every class is a subclass of all superclasses of its direct superclass. Clearly there are other relations which are transitive as well, such as `:isPartOf` or `:isCheaperThan`. We can define a property as transitive as follows:

```

:isPartOf  rdf:type  owl:ObjectProperty ;
            rdf:type  owl:TransitiveProperty .

```