:SemiDetached owl:disjointWith :Apartment .

the :SemiDetached class will be empty. Why? If the class :Apartment covers both :FurnishedApartment and its complement, :Apartment will be equivalent to owl:Thing: there cannot be an individual not belonging to a class nor its complement. If we then additionally introduce a class that is disjoint with :Apartment, this class is effectively disjoint with owl:Thing. The :SemiDetached class cannot contain any individuals, and is thereby equivalent to owl:Nothing.

**Union and Disjoint Union** We often know for some class that it is equivalent to two or more other classes: every member of the class is a member of at least one of the classes in the union. This can be specified using the owl:unionOf construct. For example:

```
:Apartment rdf:type owl:Class;
owl:unionOf (:ColdWaterFlat
:LuxuryApartment
:PenthouseApartment
:StudioApartment
:BasementApartment
:FurnishedApartment
:UnFurnishedApartment
).
```

In many cases, the member classes of the union are mutually disjoint. Of course, we can explicitly assert owl:disjointWith relations between each class, but it is more convenient to state this directly:

```
: Apartment \quad rdf: type \qquad owl: Class; \\ owl: disjoint Union Of \ ( \\ : Furnished Apartment \\ : Un Furnished Apartment \ ) \ .
```