```
1    Prefix(:=<http://www.semanticweb.org/grupo21/ontologies/2019/4/grupo21#>)
2    Prefix(owl:=<http://www.w3.org/2002/07/owl#>)
3    Prefix(rdf:=<http://www.w3.org/1999/02/22-rdf-syntax-ns#>)
4    Prefix(xml:=<http://www.w3.org/XML/1998/namespace>)
5    Prefix(xsd:=<http://www.w3.org/2001/XMLSchema#>)
6    Prefix(rdfs:=<http://www.w3.org/2000/01/rdf-schema#>)
7
8
9    Ontology(<http://www.semanticweb.org/grupo21/ontologies/2019/4/2x2>
10
11   Declaration(Class(:D1))
12   Declaration(Class(:Fml))
13   Declaration(Class(:Var))
14   Declaration(ObjectProperty(:v11))
15   Declaration(ObjectProperty(:v12))
16   Declaration(ObjectProperty(:v21))
17   Declaration(ObjectProperty(:v22))
18   Declaration(NamedIndividual(:d1val1))
19   Declaration(NamedIndividual(:d1val2))
20   Declaration(NamedIndividual(:fml))
21   Declaration(NamedIndividual(:map))
22   ##########################
23   #    Object Properties
24   ##########################
25
26   # Object Property: :v11 (:v11)
27
28   FunctionalObjectProperty(:v11)
29   ObjectPropertyDomain(:v11 :Var)
30   ObjectPropertyRange(:v11 :D1)
31
32   # Object Property: :v12 (:v12)
33
34   FunctionalObjectProperty(:v12)
35   ObjectPropertyDomain(:v12 :Var)
36   ObjectPropertyRange(:v12 :D1)
37
38   # Object Property: :v21 (:v21)
39
40   FunctionalObjectProperty(:v21)
41   ObjectPropertyDomain(:v21 :Var)
42   ObjectPropertyRange(:v21 :D1)
43
44   # Object Property: :v22 (:v22)
45
46   FunctionalObjectProperty(:v22)
47   ObjectPropertyDomain(:v22 :Var)
48   ObjectPropertyRange(:v22 :D1)
49
50
51   ##########################
52   #    Classes
53   ##########################
54
55   # Class: :D1 (:D1)
56
57   EquivalentClasses(:D1 ObjectOneOf(:d1val1 :d1val2 ))
58
59   # Class: :Fml (:Fml)
60
61   EquivalentClasses(:Fml ObjectIntersectionOf( ObjectComplementOf(
     ObjectIntersectionOf( ObjectHasValue(:v11 :d1val1) ObjectHasValue(:v12 :d1val1)))
     ObjectComplementOf( ObjectIntersectionOf( ObjectHasValue(:v11 :d1val2)
     ObjectHasValue(:v12 :d1val2)) ) ObjectComplementOf( ObjectIntersectionOf(
     ObjectHasValue(:v11 :d1val1) ObjectHasValue(:v21 :d1val1))) ObjectComplementOf(
     ObjectIntersectionOf( ObjectHasValue(:v11 :d1val2) ObjectHasValue(:v21 :d1val2)))
     ObjectComplementOf( ObjectIntersectionOf( ObjectHasValue(:v12 :d1val1)
     ObjectHasValue(:v22 :d1val1)) ) ObjectComplementOf( ObjectIntersectionOf(
     ObjectHasValue(:v12 :d1val2) ObjectHasValue(:v22 :d1val2)) ) ObjectComplementOf(
     ObjectIntersectionOf( ObjectHasValue(:v21 :d1val1) ObjectHasValue(:v22 :d1val1)))
     ObjectComplementOf( ObjectIntersectionOf( ObjectHasValue(:v21 :d1val2)
     ObjectHasValue(:v22 :d1val2)) ) ObjectIntersectionOf( ObjectHasValue(:v11 :d1val1)
     ObjectHasValue(:v12 :d1val2))))
```

```
62
63   # Class: :Var (:Var)
64
65   EquivalentClasses(:Var ObjectExactCardinality(1 :v11 :D1))
66   EquivalentClasses(:Var ObjectExactCardinality(1 :v12 :D1))
67   EquivalentClasses(:Var ObjectExactCardinality(1 :v21 :D1))
68   EquivalentClasses(:Var ObjectExactCardinality(1 :v22 :D1))
69
70
71   ############################
72   #   Named Individuals
73   ############################
74
75   # Individual: :d1val1 (:d1val1)
76
77   ClassAssertion(:D1 :d1val1)
78
79   # Individual: :d1val2 (:d1val2)
80
81   ClassAssertion(:D1 :d1val2)
82
83   # Individual: :fml (:fml)
84
85   ClassAssertion(:Fml :fml)
86   SameIndividual(:fml :map)
87
88   # Individual: :map (:map)
89
90   ClassAssertion(:Var :map)
91
92
93   DifferentIndividuals(:d1val1 :d1val2 )
94   )
```