```
---------------Position part----------------

sig Position{
    latitude: Int,
    longitude: Int
}{
    latitude >= 0
    latitude <= 3
    longitude >= 0
    longitude <= 5
}

//the positions are uniquely determinate by the place
fact differentPosition{
    all p1, p2: Position| (p1!=p2)implies(p1.latitude !=
p2.latitude or p1.longitude != p2.longitude)
}

---------------Safe Area part----------------

sig SafeArea{
    safePositions: some Position,
}

fact differentPositionInDifferentSafeArea{
    all s1,s2: SafeArea| all p:Position| (s1 !=s2) implies
((p in s1.safePositions) and (p not in s2.safePositions))
}

//in our world there are always unsafe position
fact positionConstraint{
    all s: SafeArea| some p: Position| p not in
s.safePositions
}

---------------Special Area part----------------

sig SpecialArea{
    specialPositions: some Position,
    plugs: Int,
}{
    plugs >= 0
    plugs <= 5
}
```