Project 1 2/26/20

Version 1

unnest_v1(List, FlatList) ← FlatList is the unnested list of list List.

```
unnest_v1([],[]).
unnest_v1([X|List], FlatList) ←
                        unnest_v1(X, Xs),
                        unnest_v1(List, ListNew),
                        append(Xs, ListNew, FlatList).
unnest_v1(List, [List]).
```

Version 2

unnest_v2(List, FlatList) ← FlatList is the unnested list of List.

unnest_v2(List, FlatList) ← unnest_v2(List, [], FlatList).

unnest_v2([], FlatList, FlatList).

unnest_v2([X|List], Acc, FlatList) ←
    unnest_v2(List, Acc, List2),
    unnest_v2(X, List2, FlatList).

unnest_v2(X, Acc, [X|Acc]) ←
    X \= [],
    X \= [_|_].

Equal Lists

equals(List1, List2) ← List1 and List2 contain the same elements

```
equals([],[]).
equals([X],[X].

equals(List1, List2) ← unnest_v1(List1, FlatList1),
                       unnest_v1(List2, FlatList2),
                       sublist(FlatList1, FlatList2),
                       sublist(FlatList2, FlatList1).
```