2) Algorithm

```
map (key, value) {
    reducervalue = ( <friend1>, friend_2 > --- <friend n>);
    foreach friend in ( <friend 1> <friend 2> ---- <friend n>)
        reducerkey = Build Sorted key( Person, friend);
        emit ( reducer key, reducervalue)


reducer ( key, value) {
    outputkey = key;
    outputvalue = intersection ( list 1, list 2 --- list m)
    emit ( outputkey, outputvalue);
}
```