Disjoint Sets Find and Union

```
1  int DisjointSets::find(int i) {
2    if ( arr_[i] < 0 ) { return i; }
3    else { return _find( arr_[i] ); }
4  }
```

```
1  void DisjointSets::unionBySize(int root1, int root2) {
2    int newSize = arr_[root1] + arr_[root2];
3
4    // If arr_[root1] is less than (more negative), it is the larger set;
5    // we union the smaller set, root2, with root1.
6    if ( arr_[root1] < arr_[root2] ) {
7      arr_[root2] = root1;
8      arr_[root1] = newSize;
9    }
10
11   // Otherwise, do the opposite:
12   else {
13     arr_[root1] = root2;
14     arr_[root2] = newSize;
15   }
16 }
```