Simple Code To Implement Union Find Using Array

```
class Main {
   public int find(int par[], int x) {
      if(par[x] == x) return x;
      int parent = find(par, par[x]);
      return parent;
   }

   public void unionSet(int par[], int x, int z) {
      int parent_x = find(par, x);
      int parent_z = find(par, z);
      par[parent_x] = parent_z;
   }
}
```

Path Compression Algorithm Is Done just for the sake of making the path shorter for saving time and recursion stack

```
public int findWithPathCompression(int [] par, int x){
        if(par[x] == x) return x;
        else{
            int parent = findWithPathCompression(par, par[x]);
            par[x] = parent; compression part
            return parent;
        }
}
```