1 Disjoint Set

1. Without compression Show the result of :
   
   (a) find(g)
   (b) find(a)
   (c) find(y)

2. With compression, show the result and the final graph for each find. Assume each find starts with a fresh graph above.

   (a) find(q)
   (b) find(s)
   (c) find(f)

3. With compression and quick union, perform union and show the final graph for each union. Assume each find starts with a fresh graph above.

   (a) union(f, c)
   (b) union(y, e)
   (c) union(q, d)

4. With compression and quick union, write a pseudo-code for union(q, e).