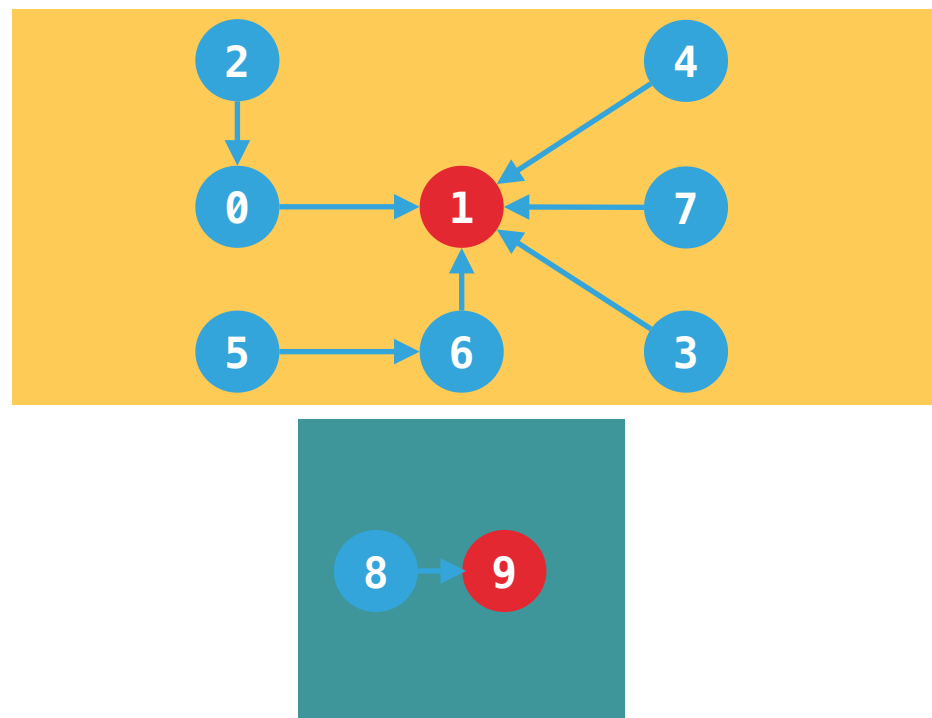


QUESTION 5.1.1 UNION-FIND: PATH COMPRESSION

Val	0	1	2	3	4	5	6	7	8	9
-----	---	---	---	---	---	---	---	---	---	---

Rep	1	1	0	1	1	6	1	1	9	9
-----	---	---	---	---	---	---	---	---	---	---



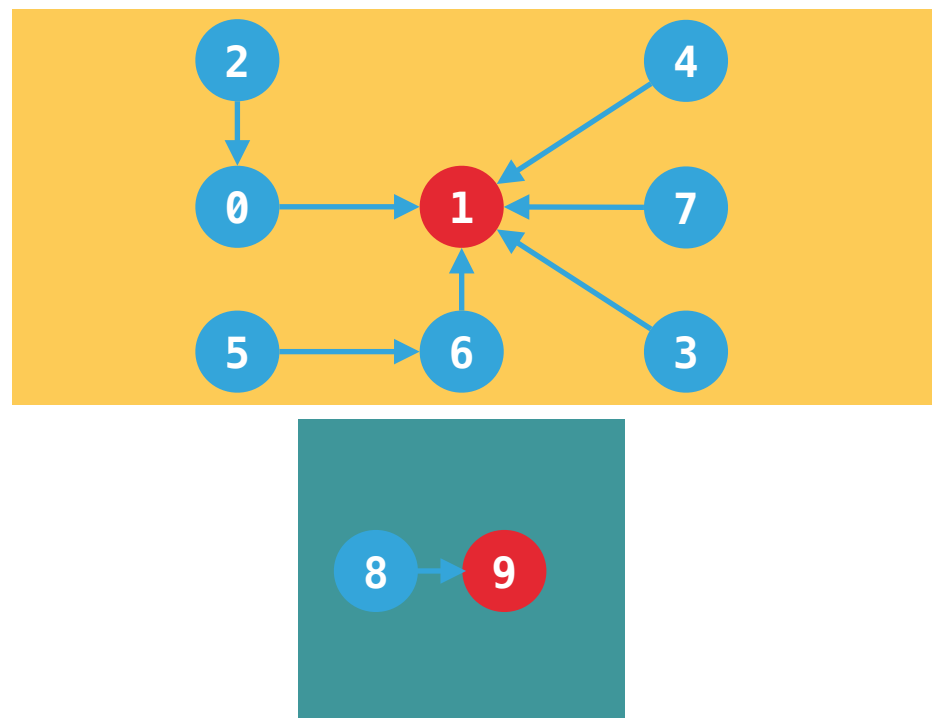
```
int find(int a) { //O(log n) ?  
    if(tab[a] != a)  
        tab[a] = find(tab[a]);  
    return tab[a];  
}
```

FIND(3)

QUESTION 5.1.1 UNION-FIND: PATH COMPRESSION

Val	0	1	2	3	4	5	6	7	8	9
-----	---	---	---	---	---	---	---	---	---	---

Rep	1	1	0	1	1	6	1	1	9	9
-----	---	---	---	---	---	---	---	---	---	---



```
int find(int a) { //O(log n) ?  
    if(tab[a] != a)  
        tab[a] = find(tab[a]);  
    return tab[a];  
}
```

FIND(3)**FIND(2)**