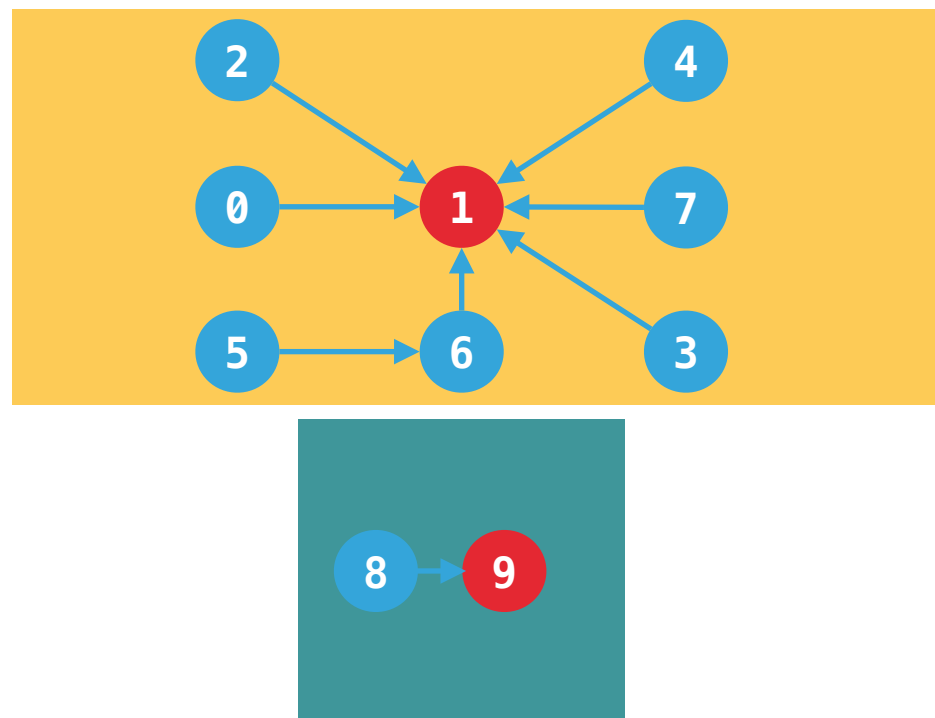


## QUESTION 5.1.1 UNION-FIND: PATH COMPRESSION

Val	0	1	2	3	4	5	6	7	8	9
Rep	1	1	1	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];  
}
```

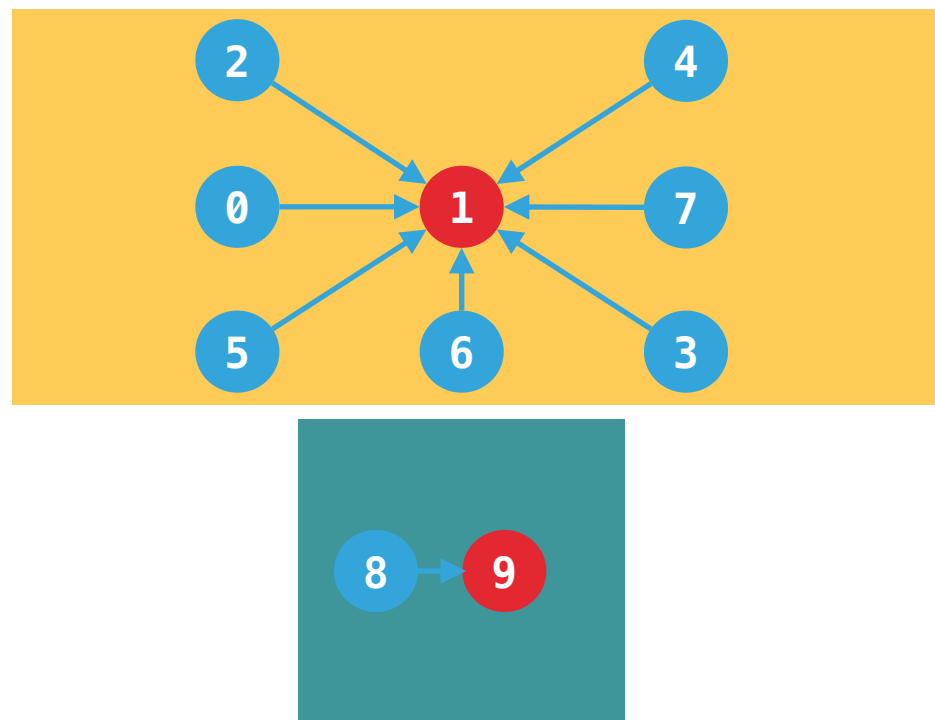
**FIND(3)**

**FIND(2)**

**FIND(5)**

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**FIND(3)**

**FIND(2)**

**FIND(5)**