

# Topic - Recursion

## Easy - Difficulty: Powerset

Write a function that takes in an array of unique integers and returns its powerset. The powerset  $P(X)$  of a set  $X$  is the set of all subsets of  $X$ . For example, the powerset of  $[1,2]$  is  $[[], [1], [2], [1,2]]$ .

Note that the sets in the powerset do not need to be in any particular order.

Sample Input

```
array = [1, 2, 3]
```

Sample Output

```
[[], [1], [2], [3], [1, 2], [1, 3], [2, 3], [1, 2, 3]]
```