Subset Problem

```
vector<vector<int>> ans;
vector<int> output
```
→ Initilasing a vector with name ans & output

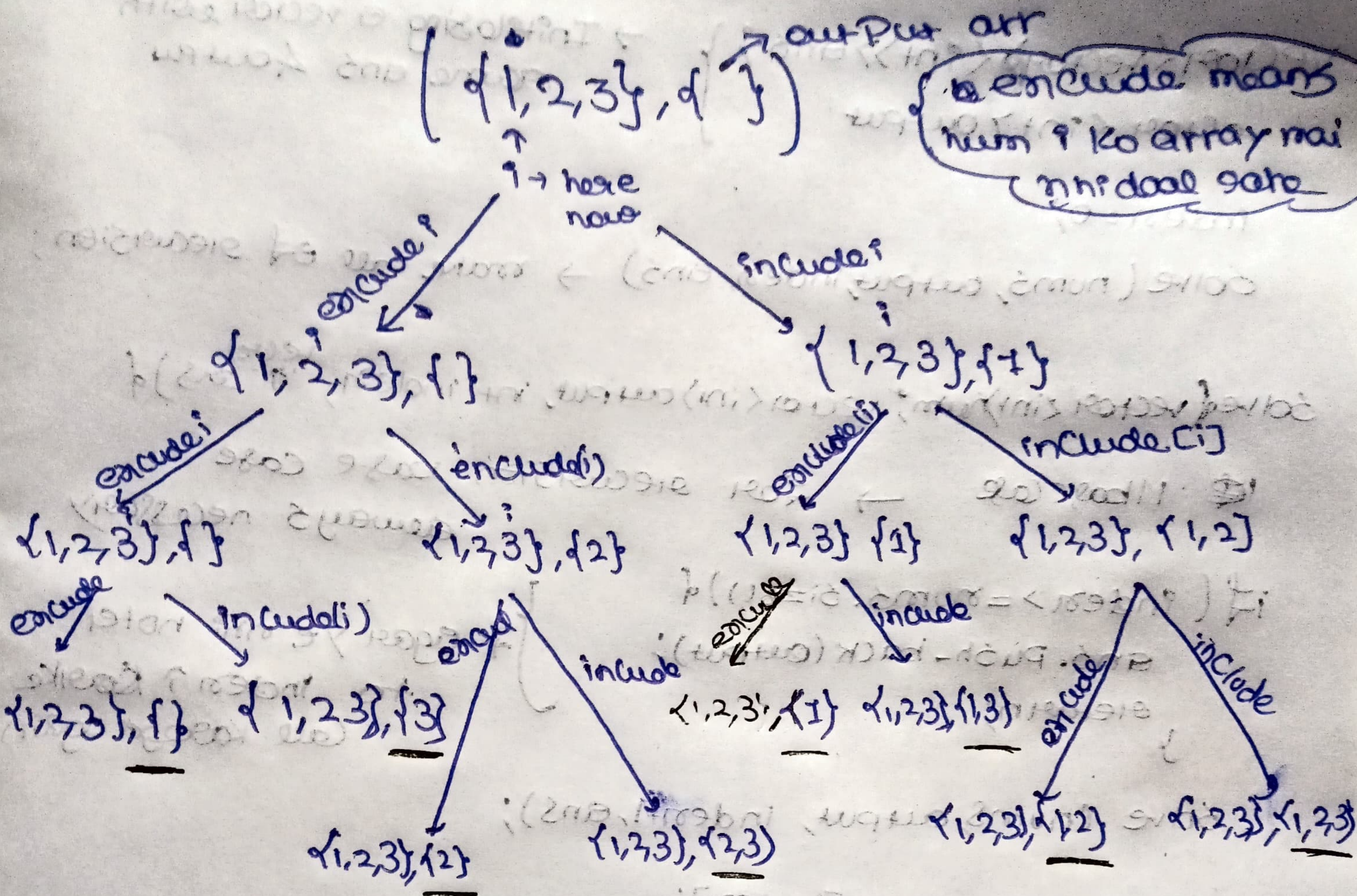
```
index=0;
solve(nums, output, index, ans)
```
→ make call of recursion;

```
solve(vector<int>num, vector<int>output, int index, vector<vector> ans){
  // base case
```
→ for recursion base case always necessary

```
if( index>=nums.size()){
    ans.push_back(output);
    return;
  }
```
→ agar ye nhi hota to index ↑ karke call karega again

```
save (nums, output, index+1, ans);

int element = nums[index];
  output.push_back(element)
  save(nums, output, index+1, ans);
}
```



({1,2,3}, { })
output arr
i → here now
exclude means num i ko array mai nhi daal rahe
exclude i
include i
{1,2,3}, { }
{1,2,3}, {1}
exclude i
include(i)
exclude(i)
include [i]
{1,2,3}, { }
{1,2,3}, {2}
{1,2,3} {1}
{1,2,3}, {1,2}
exclude
include(i)
exclude
include
exclude
include
exclude
include
{1,2,3}, { }
{1,2,3}, {3}
{1,2,3}, {1}
{1,2,3} {1,3}
{1,2,3}, {2}
{1,2,3}, {2,3}
{1,2,3}, {1,2}
{1,2,3}, {1,2,3}