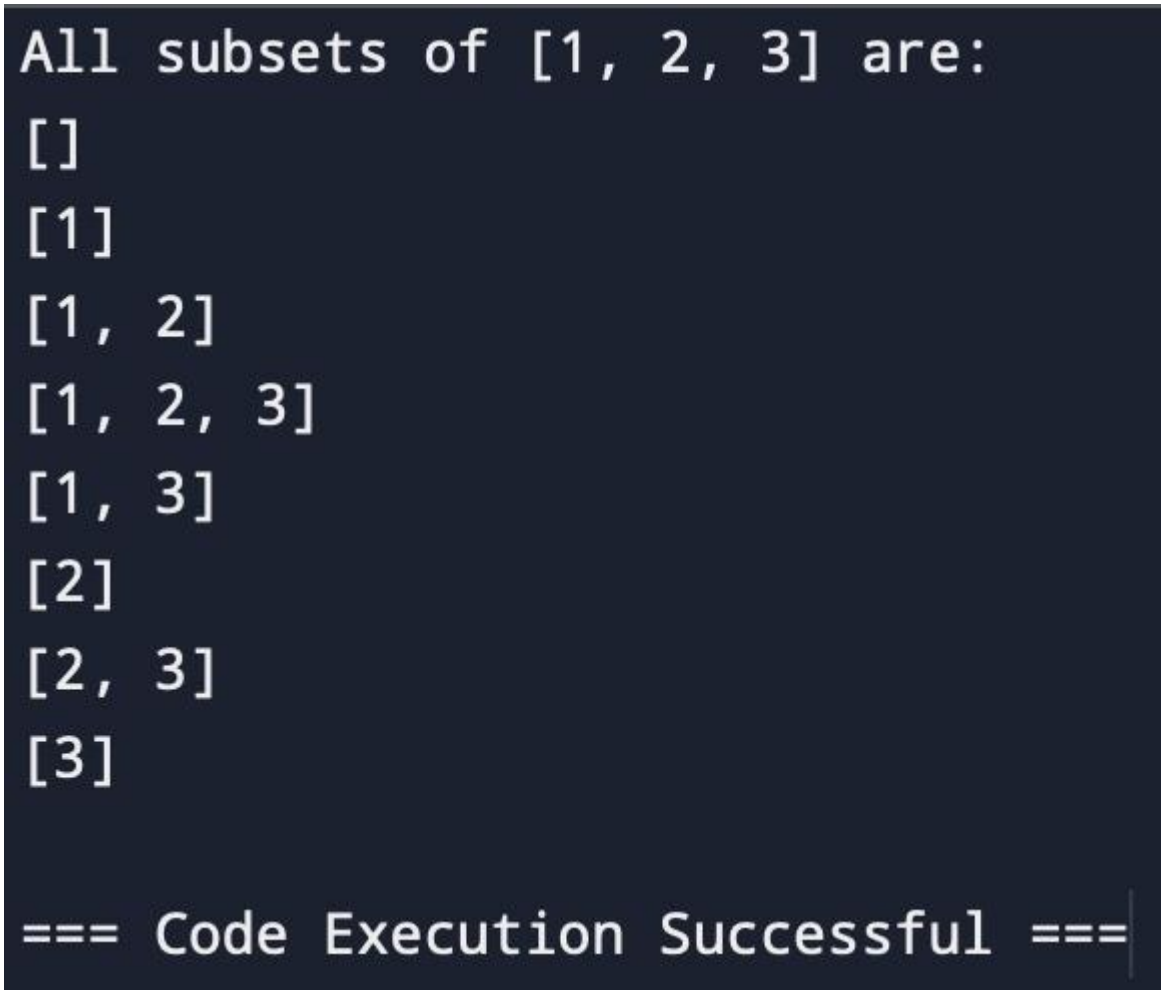
118. Subset Generation

PROGRAM:-

```
def generate_subsets(nums):
    def backtrack(start, path):
        result.append(path[:])
        for i in range(start, len(nums)):
            path.append(nums[i])
            backtrack(i + 1, path)
            path.pop()
    result = []
    backtrack(0, [])
    return result
nums = [1, 2, 3]
subsets = generate_subsets(nums)
print("All subsets of", nums, "are:")
for subset in subsets:
    print(subset)
```

OUTPUT:-



TIME COMPLEXITY:-$O(2^n)$