

숫자 집합 candidates를 조합하여 합이 target이 되는 원소를 나열하라. 각 원소는 중복으로 나열 가능하다.

Input: candidates = [2,3,6,7], target = 7

Output: [[2,2,3],[7]]

1.dfs

class Solution:

```
def combinationSum(self, candidates: List[int], target: int) -> List[List[int]]:
```

```
    def dfs(cur, nex):
```

```
        _sum = sum(cur)
```

```
        if _sum > target:
```

```
            return
```

```
        elif _sum == target:
```

```
            result.add(tuple(sorted(cur)))
```

```
            return
```

```
        for i, n in enumerate(nex):
```

```
            _cur = cur[:]
```

```
            _cur.append(n)
```

```
            dfs(_cur, nex)
```

```
    result = set()
```

```
    dfs([], candidates)
```

```
    return [list(r) for r in result]
```

class Solution:

```
def combinationSum(self, candidates: List[int], target: int) -> List[List[int]]:
```

```
    def dfs(csum, index, path):
```

```
        if csum < 0:
```

```
            return
```

```
        if csum == 0:
```

```
            result.append(path)
```

```
            return
```

```
        for i in range(index, len(candidates)):
```

```
            dfs(csum - candidates[i], i, path + [candidates[i]])
```

```
    result = []
```

```
    dfs(target, 0, [])
```

```
    return result
```