

Coin Change - Combinations - 2

1. You are given a number n , representing the count of coins.
2. You are given n numbers, representing the denominations of n coins.
3. You are given a number "amt".
4. You are required to calculate and print the combinations of the n coins (same coin can be used again any number of times) using which the amount "amt" can be paid.

Note -> Use the code snippet and follow the algorithm discussed in question video. The judge can't force you but the intention is to teach a concept. Play in spirit of the question.

A number n

n_1

n_2

.. n number of elements

A number amt

Check the sample output and question video

$1 \leq n \leq 30$

$0 \leq n_1, n_2, \dots, n \text{ elements} \leq 20$

$0 \leq \text{amt} \leq 50$

5

2

3

5

6

7

12

2-2-2-2-2-.

2-2-2-3-3-.

2-2-2-6-.

2-2-3-5-.

2-3-7-.

2-5-5-.

3-3-3-3-.

3-3-6-.

5-7-.

6-6-.

```
def coinsChangeCombinationII(coins, amount):
    idx = 0
    ans = []
    ssf = ''
    helper(coins, amount, idx, ans, ssf)
    return ans

def helper(coins, amount, idx, ans, ssf):
    if amount == 0:
        ans.append(ssf[:-1])
        return
    if amount < 0 or idx >= len(coins):
        return
    if amount - coins[idx] >= 0:
        helper(coins, amount - coins[idx], idx, ans, ssf + str(coins[idx]) + '-')
    helper(coins, amount, idx + 1, ans, ssf)

print(coinsChangeCombinationII([2, 3, 5, 6, 7], 13))
```