

Bucket Challenge

The way I approached this problem was the following: I started looking for similar problems online, I found that my problem was related to recursion and the subset sum problem. Since I'm not too experienced in writing algorithms yet, I used an algorithm found online (<https://stackoverflow.com/questions/4632322/finding-all-possible-combinations-of-numbers-to-reach-a-given-sum>) that counts how many combinations can the bucket sizes add to reach the target value. Then, I introduced an if statement to return 1 (True) or 0 (False), I also made the bucket sizes and target value as an input which Python allows really easy.

Sources:

<https://www.geeksforgeeks.org/number-of-ways-to-calculate-a-target-number-using-only-array-elements/>

<https://www.geeksforgeeks.org/python-program-for-subset-sum-problem-dp-25/>

<https://www.youtube.com/watch?v=K20Tx8cdwYY>

<https://stackoverflow.com/questions/4632322/finding-all-possible-combinations-of-numbers-to-reach-a-given-sum>

<https://www.geeksforgeeks.org/print-sums-subsets-given-set/>

<https://www.geeksforgeeks.org/ways-sum-n-using-array-elements-repetition-allowed/>