

Our Solution(s)

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 #include <vector>
4 #include <climits>
5 using namespace std;
6
7 // O(nd) time | O(n) space
8 int minNumberOfCoinsForChange(int n, vector<int> denoms) {
9     vector<int> numOfCoins(n + 1, INT_MAX);
10    numOfCoins[0] = 0;
11    int toCompare = 0;
12    for (int denom : denoms) {
13        for (int amount = 0; amount < numOfCoins.size(); amount++) {
14            if (denom <= amount) {
15                if (numOfCoins[amount - denom] == INT_MAX) {
16                    toCompare = numOfCoins[amount - denom];
17                } else {
18                    toCompare = numOfCoins[amount - denom] + 1;
19                }
20                numOfCoins[amount] = min(numOfCoins[amount], toCompare);
21            }
22        }
23    }
24    return numOfCoins[n] != INT_MAX ? numOfCoins[n] : -1;
25 }
26
```

Our Tests

Your Solutions

Run Code

Solution 1

Solution 2

Solution 3

```
1 #include <vector>
2 using namespace std;
3
4 int minNumberOfCoinsForChange(int n, vector<int> denoms) {
5     // Write your code here.
6     return -1;
7 }
8
```

Custom Output

Submit Code

