<u>Dashboard</u> / <u>My courses</u> / <u>CS23331-DAA-2023-CSE</u> / <u>Greedy Algorithms</u> / <u>1-G-Coin Problem</u>

Started on	Thursday, 22 August 2024, 10:11 AM
State	Finished
Completed on	Thursday, 22 August 2024, 10:16 AM
Time taken	5 mins 5 secs
Marks	1.00/1.00
Grade	10 00 out of 10 00 (100%)

Question **1**Correct

Mark 1.00 out of 1.00

Write a program to take value V and we want to make change for V Rs, and we have infinite supply of each of the denominations in Indian currency, i.e., we have infinite supply of { 1, 2, 5, 10, 20, 50, 100, 500, 1000} valued coins/notes, what is the minimum number of coins and/or notes needed to make the change.

Input Format:

Take an integer from stdin.

Output Format:

print the integer which is change of the number.

Example Input:

64

Output:

4

Explanaton:

We need a 50 Rs note and a 10 Rs note and two 2 rupee coins.

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2 v int main() {
 3
        int V;
        scanf("%d", &V);
 4
        int denominations[] = {1000, 500, 100, 50, 20, 10, 5, 2, 1};
 5
 6
        int n = sizeof(denominations) / sizeof(denominations[0]);
 7
        int count = 0;
 8 •
        for (int i=0; i< n; i++) {
            while (V >= denominations[i]) {
 9
10
                V -= denominations[i];
11
                count++;
12
13
        printf("%d",count);
14
15
        return 0;
16
```

	Input	Expected	Got	
~	49	5	5	~

Passed all tests! <

Correct

Marks for this submission: 1.00/1.00.

→ Problem 5: Finding Complexity using counter method

Jump to...

2-G-Cookies Problem ►