<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	Tuesday, 20 August 2024, 2:51 PM
State	Finished
Completed on	Tuesday, 27 August 2024, 12:27 PM
Time taken	6 days 21 hours
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>
 1
    int min_coins(int value) {
 3 ▼
 4
 5
        int denominations[] = {1000, 500, 100, 50, 20, 10, 5, 2, 1};
        int n = sizeof(denominations) / sizeof(denominations[0]);
 6
 7
 8
 9
        int coin_count = 0;
10
11
        for (int i = 0; i < n; i++) {</pre>
12 1
13
             coin_count += value / denominations[i];
14
15
             value %= denominations[i];
16
        }
17
18
19
        return coin_count;
20
21
22 🔻
    int main() {
23
        int V;
24
25
26
27
        scanf("%d", &V);
28
29
30
        printf("%d\n", min_coins(V));
31
32
        return 0;
33
```

		Input	Expected	Got	
~	•	49	5	5	~

Passed all tests! ✓



Marks for this submission: 1.00/1.00.

→ Problem 5: Finding Complexity using counter method

Jump to...

2-G-Cookies Problem ►