<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, 3 September 2024, 1:44 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 2:13 PM
Time taken	29 mins
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

Explanation:

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 minCoins(int V) {
      int denominations[] = {1000, 500, 100, 50, 20, 10, 5, 2, 1};
      int n = sizeof(denominations) / sizeof(denominations[0]);
 4
 5
      int count = 0;
      for (int i = 0; i < n; i++) {
 6
7
        if (V == 0) {
8
          break;
9
10
        count += V / denominations[i];
11
        V = V % denominations[i];
12
13
      return count;
14
15 v int main() {
      int V;
scanf("%d", &V);
16
17
      int result = minCoins(V);
18
      printf("%d\n", result);
19
20
      return 0;
21
```

	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 ►