Started on	Friday, 23 August 2024, 1:42 PM
State	Finished
Completed on	Friday, 23 August 2024, 1:48 PM
Time taken	5 mins 20 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 %)

```c
#include <stdio.h>

int min_coins_for_change(int V) {
    int denominations[] = {1000, 500, 100, 50, 20, 10, 5, 2, 1};
    int num_denominations = sizeof(denominations) / sizeof(denominations[0]);
    int count = 0;
    int remaining_amount = V;
    for (int i = 0; i < num_denominations; i++) {
        if (remaining_amount == 0) {
            break;
        }
        int num_notes = remaining_amount / denominations[i];
        count += num_notes;
        remaining_amount -= num_notes * denominations[i];
    }

    return count;
}

int main() {
    int V;
    scanf("%d", &V);
    printf("%d\n", min_coins_for_change(V));
    return 0;
}
```

	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 ►