

CS23331-Design and Analysis of Algorithms-2023 Batch-CSE

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

Quiz navigation



Finish review

Started on	Friday, 4 October 2024, 1:31 PM
State	Finished
Completed on	Friday, 4 October 2024, 1:58 PM
Time taken	27 mins 36 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1
Correct
Mark 1.00 out of 1.00
Flag question

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 %)

```
1 #include <stdio.h>
2 int main(){
3     int num,sum=0,i=0;
4     scanf("%d",&num);
5     int arr[]={1000,500,100,50,20,10,5,2,1};
6     int n = 9;
7     while(num!=0){
8         while(i<n && (num/arr[i]<1)){
9             i++;
10        }
11        if(i<n){
12            sum+=num/arr[i];
13            num-=((num/arr[i])*arr[i]);
14        }
15        printf("%d",sum);
16    }
17 }
```

	Input	Expected	Got	
✓	49	5	5	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Finish review

← Problem 5: Finding Complexity using counter method

Jump to...

2-G-Cookies Problem →