



No Phone No Cashier Coin Calculator

Team MJ



Team

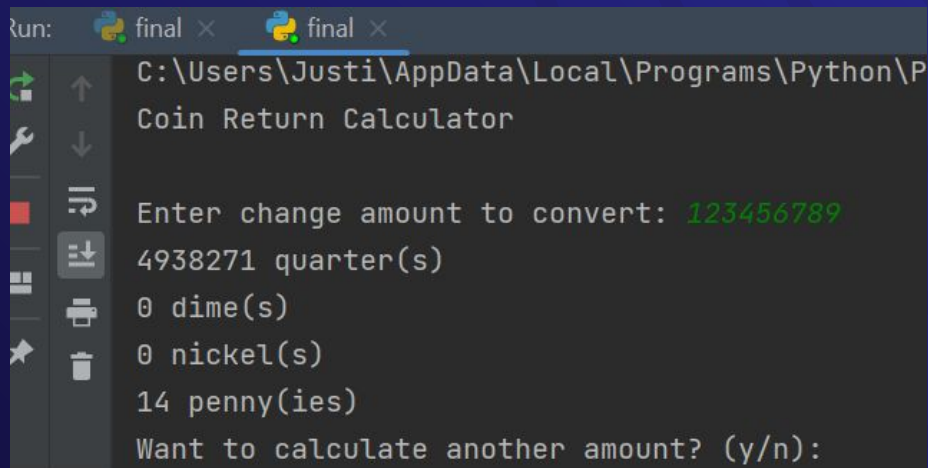
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Problems

- ❖ When Thiago is doing his math quizzes and homework, he is forbidden from using his phone so it prevents him from cheating. To that, we created a program to help him with his coins homework and quizzes! Say bye to failing and A-minuses with No Phone No Cashier coin calculator!
- ❖ When Justin and Peter are shopping for their daily snacks, they are unable to calculate on their phones the amount of change that needs to be paid so they are always snackless and drinkless. Because the phone only provides numbers, our program code gives you the amount of change in quarters, dimes, nickels, and pennies!

Solution

- ❖ We decided to create a coin return calculator that runs through a function that reads the users input, and then divides the amount into either quarter, dimes, nice



```
Run: final × final ×
C:\Users\Justi\AppData\Local\Programs\Python\Python39\Scripts>python C:\Users\Justi\AppData\Local\Programs\Python\Python39\Scripts\coin_return_calculator.py
Coin Return Calculator

Enter change amount to convert: 123456789
4938271 quarter(s)
0 dime(s)
0 nickel(s)
14 penny(ies)
Want to calculate another amount? (y/n):
```

Demo

```
1 // PersonArray.h
2 #ifndef PERSONARRAY_H
3 #define PERSONARRAY_H
4
5 #include "Person.h"
6
7 struct PersonArray {
8     Person* people;
9     int count;
10 };
11
12 #endif
13
14 // PersonArray.cpp
15 #include "PersonArray.h"
16
17 // Create a new PersonArray
18 PersonArray* CreatePersonArray(int count) {
19     PersonArray* array = new PersonArray;
20     array->people = new Person[count];
21     array->count = count;
22     return array;
23 }
24
25 // Display the PersonArray
26 void DisplayPersonArray(PersonArray* array) {
27     for (int i = 0; i < array->count; i++) {
28         DisplayPerson(array->people[i]);
29     }
30 }
31
32 // Update the PersonArray
33 void UpdatePersonArray(PersonArray* array, int index, Person* person) {
34     array->people[index] = *person;
35 }
36
37 // Main function
38 int main() {
39     // Create a new PersonArray
40     PersonArray* array = CreatePersonArray(5);
41
42     // Display the PersonArray
43     DisplayPersonArray(array);
44
45     // Update the PersonArray
46     Person* person = new Person("John Doe", 30, "123 Main St, New York, NY 10001");
47     UpdatePersonArray(array, 0, person);
48
49     // Display the PersonArray
50     DisplayPersonArray(array);
51
52     // Clean up
53     delete person;
54     delete array;
55
56     return 0;
57 }
```

+ ▶ Lessons Learned

- ❖ Witting a sufficient code is not that simple.
 - ❖ Teamwork is crucial.
- ❖ There is always room for improvement.





Issues/Bugs Known

- ❖ Our code either gives all the leftover change into pennies or no pennies at all.

+ ▶ Future Versions

- - ◆ Our project can improve in areas such as adding dollars dollar bills calculator. Such as singles, fives, tens, twenties, hundreds, e.t.c. As well as, having an option what type of coins the user wants to get back. More pennies, dimes, quarters, or nickels.



Thank you!!
Any questions?

