

## HW 4: (Submit through WorldClassroom)

Complete the following program that calculates the change in terms of different types of coins using minimum total number of coins.

```
int main()
{
    int balance,                // hold the balance in cents
        quarters,
        dimes,
        nickels,
        pennies,
        remainder;
    const int QUATER = 25,
            DIME = 10,
            NICKEL = 5;

    cout << "Enter the balance in cents: ";
    cin >> balance;

    quarters = balance / QUATER;    //Find #of quarters
    remainder balance = balance % QUATER; //Find the remaining balance

    dimes = ... balance / DIME;    //Find the #of dimes
    remainder balance = balance % DIME; //Find the remaining balance

    nickels = balance / NICKEL;    //Find the #of Nickels
    .. balance = balance % NICKEL; //Find the remaining balance

    .. pennies = balance; .. //remaining balance would be all pennies

    cout << "Balance" << balance << endl
        << "\n" << "Quarters: " << quarters << endl
        << "\n" << "Dimes: " << dimes << endl
        << "\n" << "Nickels: " << nickels << endl
        << "\n" << "Pennies: " << pennies << endl;

    return 0;
}
```