

Answer on Question#39366- Programming, C++

1. Focus of the Project

For the program, you will write a utility that converts dollars to coins. It is a simple program that must have the following:

Multiple outputs to the screen
At least one input
The use of integers and strings
Looking or repetition with Do..While, If..Else
Must have some output text to show correct value of coins that would be converted from the dollars.
Code must include comments explaining your reason for the code section or what the code is doing
Code must compile
Whole dollars only.
 If value is
 less than
 1 or 0, the program should break or exit.

Turn in your source code (.cpp file)

Solution.

```
#include <iostream>
using std::cout; // program uses cout
using std::cin; // program uses cin
using std::endl; // program uses endl

int main() // function main begins program execution
{
    do
    {
        int money; // creates integer for money input
        const int PENNY = 1; // creates constant integer for penny
        const int DIME = 10; // creates constant integer for dime
        const int QUARTER = 25; // creates constant integer for quarter
        const int NICKEL = 5; // creates constant integer for nickel
        int total = 0; //answer for amount is money * 100 / choice

        cout << "Please enter in a dollar amount to convert it to change\n"; //prompts user
        cin >> money; // user enters dollar amount

        cout << "To determine how many pennies, dimes, quarters or nickels, enter\n";
//display message
        cout << "MENU\n"
        << "1) Pennies\n"
        << "2) Dimes\n"
        << "3) Quarters\n"
        << "4) Nickels" << endl;

        char choice;

        cin >> choice;

        if ( money <= 1 ) // if dollar amount if 1 or less end loop
        {break;}

        if ( choice == '1' ) // if user types penny then
        { total = ( money * 100 ) / PENNY; } // divide money by coin
```

```

else if ( choice == '2' ) // if user types nickel then
    { total = ( money * 100 ) / DIME ; } // divide money by coin
    else if ( choice == '3' ) // if user types dime then
        { total = ( money * 100 ) / QUARTER ; } // divide money by coin
        else if ( choice == '4' ) //if user types quarter
            { total = ( money * 100 ) / NICKEL ; } // divide money by
coin
    cout << "The result is:" << total <<"'s in" << choice << endl; // display
message with amount from m * 100 / c

    }while(1);//infinite loop

cin.get(); // keep window open
return 0; // indicates successful termination
}

```

```

D:\Projects\Qq\Debug\Qq.exe
Please enter in a dollar amount to convert it to change
25
To determine how many pennies, dimes, quarters or nickels, enter
MENU
1) Pennies
2) Dimes
3) Quarters
4) Nickels
2
The result is:250's in2
Please enter in a dollar amount to convert it to change

```