

Write a Program: Coin Conversion

Your goal is to write a program that asks the user for a number of cents and then gives them the choice (using a menu) of displaying nickels, dimes, or quarters the number of cents is equivalent to.

You should have constant variables to hold:

- the number of cents per nickel. Set this to 5.
- the number of cents per dime. Set this to 10.
- the number of cents per quarter. Set this to 25.

Grading is based on having the following components:

- A comment header with your name, class meeting time, date, and a description of the program
- Constants to hold the conversion factors with the given values (1.5 points)
- Variables to hold the number of cents and the menu choice (1 point)
- Displaying a menu to the user with their three options (1 point)
- Use some form of conditional statement(s) that checks the user's choice and provides the correctly calculated output for their choice. **Note:** we are providing a whole number of nickels, dimes, or quarters. (4 points)
- Provide an output statement if the user enters an invalid choice (.5 point)
- Demonstrate your program by testing it 4 times (one each for nickels, dimes, quarters, and invalid choice) using the values I have provided in the example output. Be sure that your .txt file shows the results of all 4 runs! (2 points) **Note:** you will copy and paste four executions for your output – not all four sets of output happen from running the program one time! I don't want to see one massive program with a lot of copy/paste in it.

Turn in a .txt file to Canvas with your name, section number, all output, and source code. Example output on the next page.

Example Output:

Enter a number of cents: 47
What coin would you like to see?
47 cents in?
1. Nickels
2. Dimes
3. Quarters
Enter your choice: 1
47 cents = 9 nickels.

Enter a number of cents: 812
What coin would you like to see?
812 cents in?
1. Nickels
2. Dimes
3. Quarters
Enter your choice: 2
812 cents = 81 dimes.

Enter a number of cents: 167
What coin would you like to see?
167 cents in?
1. Nickels
2. Dimes
3. Quarters
Enter your choice: 3
167 cents = 6 quarters.

Enter a number of cents: 2000
What coin would you like to see?
2000 cents in?
1. Nickels
2. Dimes
3. Quarters
Enter your choice: 5
Sorry. 5 wasn't a valid choice.