# Objective

In this assignment you will be practicing variable declaration, assignment statement, expression, string concatenation and java mathematical operations.

# problem

You are writing an app to convert the certain number of Yuan (China’s money currency) to dollar amount. Then your program needs to covert the dollar amount to quarters, dimes, nickels and pennies .

1 Yuan is equivalent to .14 dollar amount.

# Sample Calculation

Int yuan = 1234;

int pennies = (int)(yuan \* .14) \* 100; // converting dollar to pennies

int dollar = pennies /100 ; // finding the number of dollars

pennies= pennies % 100; // leftover pennies

int quarters = pennies/25 ; // finding the number of the quarters

pennies = pennies % 25 ;// finding the left over pennies

int dime = pennies / 10; // finding the number of the dimes

pennies = pennies % 10; // leftover pennies

int nickel = pennies /5; // finding the number of the nickels

pennies = pennies % 5; // leftover pennies

display the variables dollars, quarters, dimes, nickel and pennies

# preparation

Watch the vide on converting millimeter to meter, centimeter , and millimeter

# Requirements

* your code should satisfy all the rubric criteria
* you must have minimum two methods: main and another method to do the calculations
* must use variables to store numbers
* must include block comments for each method
* your output must be correct and match the provide output
* you need to run your program **two different times with different values** to make sure the output is correct. There is no need to write multiple methods for conversion. Refer to the sample output. You only need to turn in one java file
* you need to use the operations / and % repeatedly to find out the number of the dollars, quarters, dimes, nickels and pennies. Refer to the video posted on converting centimeter to meter, centimeter and milli meter
* 1 dollar is 100 pennies, a quarter is 25 pennies, a dime is 10 pennies, a nickel is 5 pennies.

# Required methods

* **public static void description (): This** method describes what the program does. In this method include some print/println statements to describe the application. This method should display “Welcome to the Coin Converter  
  Tell many the number of the pennies you have,   
  I will tell you the number of dollar bill, quarters, dimes, nickels and pennies”  
  when it is called in the main method.
* **public static void convert():** This method does all the calculations and uses print/println to display the result on the screen. Refer to the provided sample calculation and follow it to write your code. Make sure to declare a variable to hold the number of Yuan: int yuan = 1234; then convert the Yuan to pennies: int pennies = (int)(yuan \*.14 \* 100), type casting the result of the expression to an integer. The rest would be finding the number of the dollars, quarters, dime, nickels and pennies.
* **public static void main (String[] args):** This method calls the methods description and the method convert.

# Sample output #1

set the number of the Yuan to 1234, compile your code and run it. you should get the following output

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
% Welcome to the Coin Converter %  
% I can convert the number of the pennies you have, %  
% to the number of dollar bill, quarters, dimes, nickels and pennies %  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
  
  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Here is the result:   
1234 Yuan is equivalent to 17276 U.S pennies  
17276 pennies is equal to :   
172 dollars  
3 quarters  
0 dimes  
0 nickels  
1 pennies

# Sample output #2

Set the number of the Yuan to 34567, compile your code, run your code. You should get the following output

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
% Welcome to the Coin Converter %  
% I can convert the number of the pennies you have, %  
% to the number of dollar bill, quarters, dimes, nickels and pennies %  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
  
  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Here is the result:   
34567 Yuan is equivalent to 483938 U.S pennies  
483938 pennies is equal to:   
4839 dollars  
1 quarters  
1 dimes  
0 nickels  
3 pennies