CS 170 ch.2 Lab 3

# Task 1

Question: You have collected pennies for many years. Now you would like to convert them into dollars, quarters, dimes, nickels, and pennies. Write a program that functions as a change machine. Report how many dollars, quarters, dimes, nickels, and pennies you would get when using the machine. Use integers for your variables.

**Test case 1: You have 282 pennies.**

How many pennies do you have: 282

Your change is 2 dollar, 3 quarter, 0 dime, 1 nickel, and 2 pennies

**Test case 2: You have 337 pennies.**

How many pennies do you have: 337

Your change is 3 dollar, 1 quarter, 1 dime, 0 nickel, and 2 pennies

|  |
| --- |
|  |

|  |
| --- |
|  |

# Task 2

Question: Write a class named **HalfString**that asks the user to enter an **EVEN** length string. Then, your program should print out the first half.

**Methods to use:**substring(), length()

**Testing cases:**

WooHoo              => Woo

HelloThere          => Hello

abcdef                  => abc

ab                           => a

0123456789       => 01234

kitten                    => kit

*(Note that the sample input test cases are shown before the “=>” and the expected output for each test case is after the “=>”. Your program should print out the expected output only, not the input.)*

***Sample output:***

***Please enter an even length string: Woohoo***

***half the string is: Woo***

|  |
| --- |
|  |

|  |
| --- |
|  |

# Task 3

Question: Write a programthat asks the user to enter any string. Then, your program should print out a new string formulated in the following manner:

**last character** + middle string + **first character**

**Methods to use:**substring(), length(), charAt()

**Testing cases:**

computer              => romputec

HelloThere          => eello TherH

abcdef                  => fbcdea

**Sample run:**

Enter a string: computer

romputec

|  |
| --- |
|  |

|  |
| --- |
|  |