## Postage.java

## **Background:**

Postage rates are calculated (as of October, 2016) according to the following rules:

Class	Rate
First class, domestic	\$0.47 for the first ounce, \$0.21 for each additional ounce.
Postcards, domestic	\$0.34
Media Mail	\$2.61 for the first pound, 2-7 pounds \$0.48 for each additional pound, And \$0.39 for each additional pound beyond 7 pounds.

## Assignment:

1. Pseudocode and testing are required. On paper,\ show clearly the logic of the if-else decisions that have to be made.

- 2. This is a single class program.
- 3. Use if-else blocks(s) that are nested. (General conditions outside, more specific inside.)
- 4. Write a program that:
  - a. Prompts the user for the following information:

The mail class, where the user enters '1' for First class, domestic, '2' for Postcard, domestic, or '3' for Media Mail. If any other number is entered, give the user an appropriate response.

The weight of the item, in ounces for First class, domestic, or in pounds for Media Mail.

b. Calculates and prints the following:

The category, or class of the item to be mailed. The weight of the item. The price of the item. Format the output to look *exactly* like the examples.

```
2.
```

```
public static void main ( String [] args )
```

```
{
```

```
Postage sendthis = new Postage ( );
sendthis.getData ( );
sendthis.calculateCost ( );
sendthis.printInfo ( );
```

}

As you can see, you will need some field variables.

3. On the following pages you will find 6 sample run outputs. Format the output, numerical and String, as shown. Input values are shown in bold. To save space, I used a line to separate the examples in lieu of three blank lines, which you will use.

Hello, and welcome to the US Post Office.

(1) First class, domestic

(2) Postcards, domestic

(3) Media Mail

Using the menu above, please enter the category of your postage -> 1 Enter the weight, in ounces, of your letter (an integer) -> 12

Your postage class: Weight: Charge: First class, domestic 12 ounces \$2.78

Have a nice day!

Hello, and welcome to the US Post Office.

(1) First class, domestic

(2) Postcards, domestic

(3) Media Mail

Using the menu above, please enter the category of your postage  $\rightarrow 2$ 

Your postage class:Postcards, domesticWeight:--Charge:\$0.34

Have a nice day!

Hello, and welcome to the US Post Office.

- (1) First class, domestic
- (2) Postcards, domestic
- (3) Media Mail

Using the menu above, please enter the category of your postage  $\rightarrow 3$ Enter the weight, in pounds, of your package (an integer)  $\rightarrow 6$ 

Your postage class:Media MailWeight:6 poundsCharge:\$5.01

Have a nice day!

Hello, and welcome to the US Post Office.

- (1) First class, domestic
- (2) Postcards, domestic
- (3) Media Mail

Using the menu above, please enter the category of your postage -> 4

Please enter a valid postage class!

Have a nice day!

Hello, and welcome to the US Post Office.

- (1) First class, domestic
- (2) Postcards, domestic
- (3) Media Mail

Using the menu above, please enter the category of your postage  $\rightarrow 1$ Enter the weight, in ounces, of your letter (an integer)  $\rightarrow 3$ 

Your postage class: Weight: Charge: First class, domestic 3 ounces \$0.89

Have a nice day!

Hello, and welcome to the US Post Office.

- (1) First class, domestic
- (2) Postcards, domestic
- (3) Media Mail

Using the menu above, please enter the category of your postage  $\rightarrow 3$ Enter the weight, in pounds, of your package (an integer)  $\rightarrow 9$ 

Your postage class: Weight: Charge: Media Mail 9 pounds \$6.27

Have a nice day!