

## CSE 323 – Software Engineering

### Lab 4 -BlackBox & WhiteBox Testing

#### Objectives

The students will be introduced to the concept of black-box and Whitebox testing.

#### Problem 1: BlackBox Testing

Read carefully the description of the Parcel Postage challenge at this location:

<http://users.csc.calpoly.edu/~jdalbey/205/Assign/QAChallenge/ChallengeProblem4.html>

Write a set of Black Box test cases for testing of the program which solves the problem above.

Create a table like the one below. The Transaction input field shows the input data you are creating that will be in the Transaction file. Show the expected output using the format shown in the problem. Use the provided shipping rate text file

Case #	Description	Transaction input	Expected Output
1			
2			
3			
4			
...			

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## **Problem 2 – White-box Testing / Path Coverage**

Examine the code for the file TaxTime.Java. Draw a code graph of the main class! How many independent paths are there? What are the conditions that cause each of the paths to be taken? Draw up a table giving you an overview of the conditions. Give test cases that exercise each path. Are there any errors in the program?

Note: You will need Java compiler to fully answer problem 2. Use any online/offline Java compiler ([https://www.onlinegdb.com/online\\_java\\_compiler](https://www.onlinegdb.com/online_java_compiler))