**CSC 1302: PRINCIPLES OF COMPUTER SCIENCE II**

**Lab 4**

**How to Submit**

Please submit your answers to the lab instructor once you have completed.

Failure to submit will result in a **ZERO FOR THIS LAB. NO EXCEPTIONS**.

Write a Java class called ***BankAccount*** (Parts of the code is given below), which has two private fields: *name* (String) and *balance* (double), and three methods: *deposit*(double amount), *withdraw*(double amount) and *toString*(). Write the necessary constructors, accessor methods and mutator methods. The *deposit()* method adds the *amount* to the account causing the current balance to increase, *withdraw()* method subtracts the amount causing the current *balance* to decrease and t*oString()* method should return the *name* and the current *balance* separated by a comma. For example, if you print out the object with name Jake and balance 40.0 then it should print:

Jake, $40.00

public class BankAccount {

private String name;

...

public void deposit(double amount) {

balance = balance + amount;

}

public void withdraw(double amount) {

}

...

}

Write a client program called ***BankAccountClient*** that creates a ***BankAccount*** object called B1 and initializes *name* and *balance* at the time of instantiating the object using the constructor. Call the *deposit()* method to add $500 to this account and call the method (override *toString()* method) to print the current balance using System.out.println(). Next, call the *withdraw()* method to subtract $300 from this account and print B1 using System.out.println(). Create another object called B2 without initializing it and display the name and current balance for this object using System.out.println(). Finally, use the accessor/mutator methods to assign name and balance to B2. Print the object B2, using System.out.println().