

```

1 package Lab1;
2
3 /**
4  * A new class called BankAccount to facilitate these banking methods
5  * @author Kyle Leahy
6  * @version 1.0
7  */
8 public class BankAccount {
9
10     private double balance; //Private primitive type to be
11                             //used for arithmetic
12
13     /**
14      * Method calculates a deposit transaction based off 'balance'
15      * @param amount
16      */
17     public void deposit(double amount) {
18         balance = balance + amount;
19     }
20
21     /**
22      * Method calculates a withdrawal transaction also using 'balance'
23      * @param amount
24      */
25     public void withdrawal(double amount) {
26         balance = balance - amount;
27     }
28
29     /**
30      * Method retrieves the balance of the bank account in a 'getBalance
31      ' method
32      * @return Returns the balance of the bank account
33      */
34     public double getBalance() {
35         return balance;
36     }
37
38     /**
39      * Method calculates the interest of the given bank account
40      * at a fixed value of 5% APY
41      */
42     private void calculateInterest() {
43         balance = balance * 1.05; // <- 5% APY set value
44     }
45
46     /**
47      * Main function creating 2 new BankAccount objects for Bob and Jane
48      * As well depositing and withdrawing cash to ensure
49      * after printing the balance, the methods work properly
50      * @param args

```

```
50      */
51      public static void main(String args[]) {
52          BankAccount bobsAccount = new BankAccount();
53          BankAccount janesAccount = new BankAccount();
54
55          bobsAccount.deposit(450.50);
56          janesAccount.deposit(1230.75);
57
58          bobsAccount.withdrawal(230.00);
59          janesAccount.withdrawal(452.43);
60
61          bobsAccount.deposit(412.23);
62          janesAccount.withdrawal(142.56);
63
64          System.out.println("Bob's Account is currently: " + bobsAccount.
getBalance());
65          System.out.println("Jane's Account is currently: " + janesAccount
.getBalance());
66      }
67  }
68
69
```