Class BankAccount

A bank account has an accountNumber and balance that can be changed by deposits and withdrawals.

Constructor Summary

BankAccount(int anAccountNumber) Constructs a bank account with a zero balance	
BankAccount(int anAccountNumber, double initialBalance) Constructs a bank account with a given balance	

Method Summary

void	**deposit**(double amount) Deposits money into the bank account.
int	**getAccountNumber**() Gets the account number of this bank account.
double	**getBalance**() Gets the current balance of the bank account.
java.lang.String	**toString**() Gets the string representation of acessor methods.
void	**withdraw**(double amount) Withdraws money from the bank account.

```
/**
   This program tests the BankAccount class.
*/

public class BankAccountTester
{
        public static void main(String[] args)
   {
     BankAccount one = new BankAccount(1);
     BankAccount two = new BankAccount(2,1000);
     one.deposit(50);
     one.deposit (25.25);

     two.withdraw(12.56);
     two.withdraw(100);
     System.out.println( one);
     System.out.println(two);
}
}
```

public class **Bank**
This bank contains a collection of bank accounts. Use an ArrayList.

Constructor Summary

Bank() Constructs a bank with no bank accounts.	

Method Summary

void	**addAccount** (BankAccount a) Adds an account to this bank.
int	**count** (double atLeast) Counts the number of bank accounts whose balance is at least a given value.
BankAccount	**find** (int accountNumber) Finds a bank account with a given number.
BankAccount	**getMaximum** () Gets the bank account with the largest balance.
double	**getTotalBalance** () Gets the sum of the balances of all accounts in this bank.

```
/**
   This program tests the Bank class.
*/
public class BankTester
{
   public static void main(String[] args)
   {
      Bank firstBankOfJava = new Bank();
      firstBankOfJava.addAccount(new BankAccount(1001, 20000));
      firstBankOfJava.addAccount(new BankAccount(1015, 10000));
      firstBankOfJava.addAccount(new BankAccount(1729, 15000));
      System.out.println("Total of all Accounts: " + firstBankOfJava.getTotalBalance());

      double threshold = 15000;
      int c = firstBankOfJava.count(threshold);
      System.out.println(c + " accounts with balance >= " + threshold);

      int accountNumber = 1015;
      BankAccount a = firstBankOfJava.find(accountNumber);
      if (a == null)
         System.out.println("No account with number " + accountNumber);
      else
         System.out.println("Account with number " + accountNumber
               + " has balance " + a.getBalance());

      BankAccount max = firstBankOfJava.getMaximum();
      System.out.println("Account with number "
            + max.getAccountNumber()
            + " has the largest balance.");
```

}}