ICS 372 Object-Oriented Design and Implementation
Class Exercise 2
Solution to Question 5
For answers to the other questions, please see the corresponding quiz on D2L.

a) Implement a method named **transferTo()** with two parameters: **account** and **amount** to transfer **amount** dollars from **this** to **account** . If there is enough balance, the money is transferred and the method returns **true**. Otherwise, it returns **false**.

Override the transferTo() and **withdraw()** methods appropriately in **CheckingAccount.**

```
public boolean transferTo(Account account, double amount) {
    if (account.getBalance() >= amount) {
      account.deposit(amount);
      this.withdraw(amount);
      return true;
    }
    return false;
 }
```

b) Create a class called **CheckingAccount** that inherits from **Account**. Every checking account has to maintain a minimum balance, which is the same for all checking accounts. It should be possible to change this minimum balance from time to time using a **static** method in **CheckingAccount**.

```
public class CheckingAccount extends Account {
   private static double minimumBalance;
   public CheckingAccount(double balance) throws Exception {
     super(balance);
     if (balance < minimumBalance) {
       throw new Exception("Need to maintain a minimum balance");
     }
   }

   public static double getMinimumBalance() {
     return minimumBalance;
   }

   public static void setMinimumBalance(double minimumBalance) {
     CheckingAccount.minimumBalance = minimumBalance;
   }
```

```
    @Override
    public void withdraw(double amount) {
      if (getBalance() >= minimumBalance) {
        super.withdraw(amount);
      }
    }

   @Override
    public boolean transferTo(Account account, double amount) {
        if (getBalance() >= minimumBalance) {
           return super. transferTo (account, amount);
        }
        return false;
    }
}
```