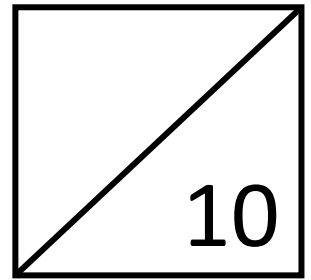


## Quiz 7

Name: \_\_\_\_\_

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Section: \_\_\_\_\_



**Q1. [10 marks]** The `main` method in class `Cafe` creates a `Patron` object and invokes its `drink` method for a list of drinks. The Java API documentation for class `Patron` is shown below. Constructor, getters and setters are not shown for brevity sake.

### - Java API Documentation -

**public class Patron**

```
public void drink(String beverage)
           throws AllergyException, SickException, FaintException
```

Drink the beverage.

**Parameters:**

beverage - String object

**Throws:**

`AllergyException` - Thrown when the person has an allergy reaction to the drink.

`SickException` - Thrown when the person feels sick due to the drink.

`FaintException` - Is a `RuntimeException` and thrown when the person faints.

Read the `main` method of class `Cafe` on the next page. Complete it such that

1. For each beverage in `beverageList`, call the `drink()` method of `cindy` (`Patron` object).
2. If there is an allergy reaction (`AllergyException`),
  - a. Print "Allergic to *<beverage>*". Note: Replace *<beverage>* with the actual beverage drank.
  - b. Continue with the next beverage.
3. If there is a seizure (`SickException`), print "Sick!" and stop drinking immediately.
4. Do NOT catch `FaintException`.
5. At the end of the program, **ALWAYS** print "Bye bye" **regardless of any Exception**.

**Sample output:**

```
D:\> java Cafe
Drink Tea
Drink Coffee
Allergic to Coffee
Drink Beer
Sick!
Bye bye
```

**Answer:**

```
import java.util.ArrayList;

public class Cafe {

    public static void main(String[] args) {
        Patron cindy = new Patron("Cindy");
        ArrayList<String> beverageList = new ArrayList<>();
        beverageList.add("Tea");
        beverageList.add("Coffee"); // Cindy is allergic to coffee
        beverageList.add("Beer"); // Cindy will feel sick if she drinks beer
        beverageList.add("Milk");

        try {
            // For each beverage in beverageList
            for (int i=0; i < beverageList.size(); i++) {
                // cindy drinks the beverage
                String beverage = beverageList.get(i);
                try {
                    cindy.drink(beverage);
                } catch (AllergyException e) {
                    System.out.println("Allergic to " + beverage);
                }
            }
        } catch (SickException e) {
            System.out.println("sick");
        } finally {
            System.out.println("Bye bye");
        }
    }
}
```

