

Quiz 8

Name: _____

1. Given the following classes:

```
public class FoodPoisoningException extends RuntimeException {
    public FoodPoisoningException(String message){
        super(message);
        System.out.println("apple");
    }
}
```

```
public class NoCurryPokException extends Exception {
    public NoCurryPokException(String message){
        super(message);
        System.out.println("grape");
    }
}
```

```
import java.util.Scanner;

public class CurryPokApp {
    private static int CURRYPOK_NUMBER = 13;

    public static void run() {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a curry pok amount> ");
        int amount = sc.nextInt(); //assume enters 20
        try {
            getCurryPok(amount);
            System.out.println("yum");
        } catch (NoCurryPokException e) {
            System.out.println(e.getMessage());
        } finally {
            System.out.println("pear");
        }
        System.out.println("durian");
    }

    public static void main(String[] args) {
        try {
            run();
        } catch (Throwable e) {
            System.out.println("kiwi");
        }
    }
}
```

```
public static void getCurryPok(int amount) throws NoCurryPokException {
    try {
        if (amount > CURRYPOK_NUMBER) {
            throw new NoCurryPokException("not enough");
        }
        if (amount == CURRYPOK_NUMBER) {
            throw new FoodPoisoningException("poison");
        }
    } finally {
        System.out.println("close door");
    }
}
}
```

2. [2 marks] What is the output of the program if the user enters 20 for the amount?

Answer:

```
C:\quiz>java CurryPokApp
Enter a curry pok amount> 20
```

[2 marks] What is the output of the program if the user enters 13 for the amount?

Answer:

```
C:\quiz>java CurryPokApp
Enter a curry pok amount> 13
```

3. [4 marks] Given the following class:

```
public class Student {
    private int age;

    public Student(int age) {
        this.age = age;
    }

    public int getAge() {
        return age;
    }

    public void setAge(int age) {
        this.age = age;
    }

    @Override
    public String toString() {
        return "" + age;
    }
}
```

Draw the memory state diagram for the following program at the point of time when the program reaches line 7:

1	public class Quiz {
2	public static void doMagic(Student s1, Student s2) {
3	Student temp = s1;
4	s1 = s2;
5	s2 = temp;
6	s2.setAge(3);
7	//How does the memory state diagram look here?
8	}
9	
10	public static void main(String[] args) {
11	Student s1 = new Student(1);
12	Student s2 = new Student(2);
13	doMagic(s1, s2);
14	}
15	}

Answer: