

Note: You may use your notes or my notes from my website. No other resources may be used during this quiz.

Question 1. (2 points)

a) Consider the Record and Main classes below carefully. What would be printed out after running Main.java?

```
// Record.java
public class Record {
    private String artist;
    private String name;

    public Record(String artist, String name) {
        artist = artist;
        name = name;
    }

    public String getArtist() {
        return this.artist;
    }

    public String getName() {
        return this.name;
    }
}

// Main.java
public class Main {
    public static void main(String[] args) {
        Record r1 = new Record("Marvin Gaye", "What's Going On");

        System.out.println(r1.getName() + " by " + r1.getArtist());
    }
}
```

- "What's Going On by Marvin Gaye"
- "What's Going On by null"
- "null by null"
- "null by Marvin Gaye"

b) Explain your reasoning for your answer **in one sentence**.

The Record constructor doesn't use this, resulting in references to the parameters, not the instance variables, and

Question 2. (2 points)

Consider the code below. After running the main method in Main.java, what is the value of NUM_PENGUINS?

```
// Penguin.java
public class Penguin {
    private static int NUM_PENGUINS;
    private String name;

    public Penguin(String name) {
        this.name = name;
        NUM_PENGUINS++;
    }

    public Penguin() {
        this.name = "Pingu's friend";
        NUM_PENGUINS++;
    }
}

// Main.java
public class Main {
    public static void main(String[] args) {
        Penguin p1 = new Penguin("Pingu");
        Penguin p2 = new Penguin();
    }
}
```

1. 0
2. null
3. 2
4. 1

Question 3. (1 point) What's value of phrase after the code below executes?

In the code below, underscores (_) are being used to depict space characters.

```
String phrase = "why are you yelling___";
phrase.trim();
phrase.toUpperCase();
```

- "WHY ARE YOU YELLING"
- "WHY ARE YOU YELLING___"
- "why are you yelling"
- "why are you yelling___" because strings are immutable