

## Class 8

### 1. Using StringBuilder

- Build the word **Hello** using append for each letter.
- Iterate the below Strings array and print only palindromes:

["hello", "world", "radar", "math", "kayak", "bank", "rotor"]

### 2. Using String format:

- Print your name and age
- Do the same using printf
- What is biggest concern using String format?

### 3. Using Regex

- Iterate the below Strings array and print only the word contains the letter **a**:

["hello", "world", "radar", "math", "kayak", "bank", "rotor"]

### 4. What are generics in Java?

5. Write a method which can get a variable of any type and prints it.

6. Which principles are missed in the below class:

```
public class PleaseRefactor {  
    public static void main(String[] args) {  
        calculate(x: 9);  
        calculate(x: 9);  
    }  
  
    private static void calculate(double x) {  
        double d = Math.sqrt(x);  
        if(d > 2){  
            System.out.println(d);  
        }  
    }  
  
    private static void calculate2(double x) {  
        double d = Math.sqrt(x);  
        if(d > 2){  
            System.out.println(d);  
            if (d > 1){  
                System.out.println("bigger");  
            }  
        }  
    }  
  
    private void superCalculate(double x){  
        System.out.println(x);  
    }  
}
```

7.

- Print the index of the letter **a** in the word: Dictionary
- Replace the letter **a** with the letter **x**.

8.

- Print the number of all of the public methods in class **String**
- Print the names of all of the public methods in class **String**

**\*\* CHALLENGES:**

9.

- Write a class User with (String) name.
- Create a public constructor which accepts the name
- Create a private getter getName() which returns the name.
- Create an object of class User using Reflection only (and pass a name).
- Using the created object print getName() returned value

10.

- Using Regex change all occurrences of the word **dog** to **cat**

**"The dog says meow. All dogs say meow."**