



# String, String Buffer and String Builder

Rawlabs Academy

# What is **String**?

- String is **non-primitive** data type and it is also class which is under `java.lang` package.
- String is collection of characters
- Immutable
- Can create object without new keyword

# Why String is **Immutable**?

- String are **constants**, values can't be changed after they are created
- Because java uses the concept of **string literal**
- Suppose, if one reference variable changes the value of the object, it will be affected to all the reference variables. That is why string objects are immutable in java.

# Example

```
public class Main {  
    public static void main(String[] args) {  
        String s = "Java";  
        s.concat(" Programming");  
        System.out.println(s);  
    }  
}
```

Output : Java

The `concat()` method is append the string at the end. So, `String` are immutable objects.

## Java Heap Memory

### String Constant Pool

Java

Java Programming

## Cont...

```
public class Main {  
    public static void main(String[] args) {  
        String s = "Java";  
        s = s.concat(" Programming");  
        System.out.println(s);  
    }  
}
```

Output: `Java Programming`

So, it assign it into the **reference variable**.