MODULE 3:
OBJECT ORIENTED ANALYSIS & DESIGN
DATA STRUCTURES & ALGORITHMS

String Handling

Java Strings

Java Strings

Object

String is a Java object

Characters

Represents a sequence of characters

Class

java.lang.String class is used to create and manipulate strings

Immutable

A string is immutable in nature

Java Strings

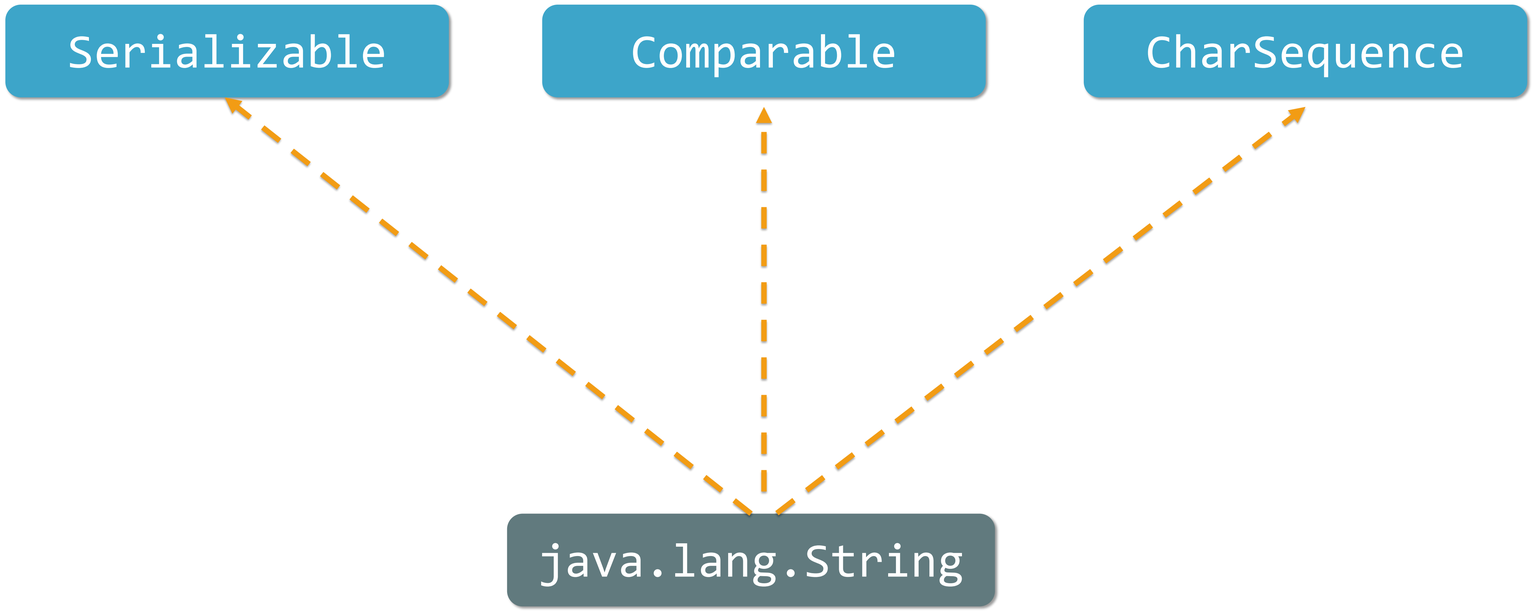
With Strings in Java you can perform various operations, some of which are:

Search → The quick brown fox jumps over the lazy dog

Create Substring → The quick brown fox jumps over the lazy dog

Create new strings → The quick brown fox jumps over the lazy dog

Java Strings

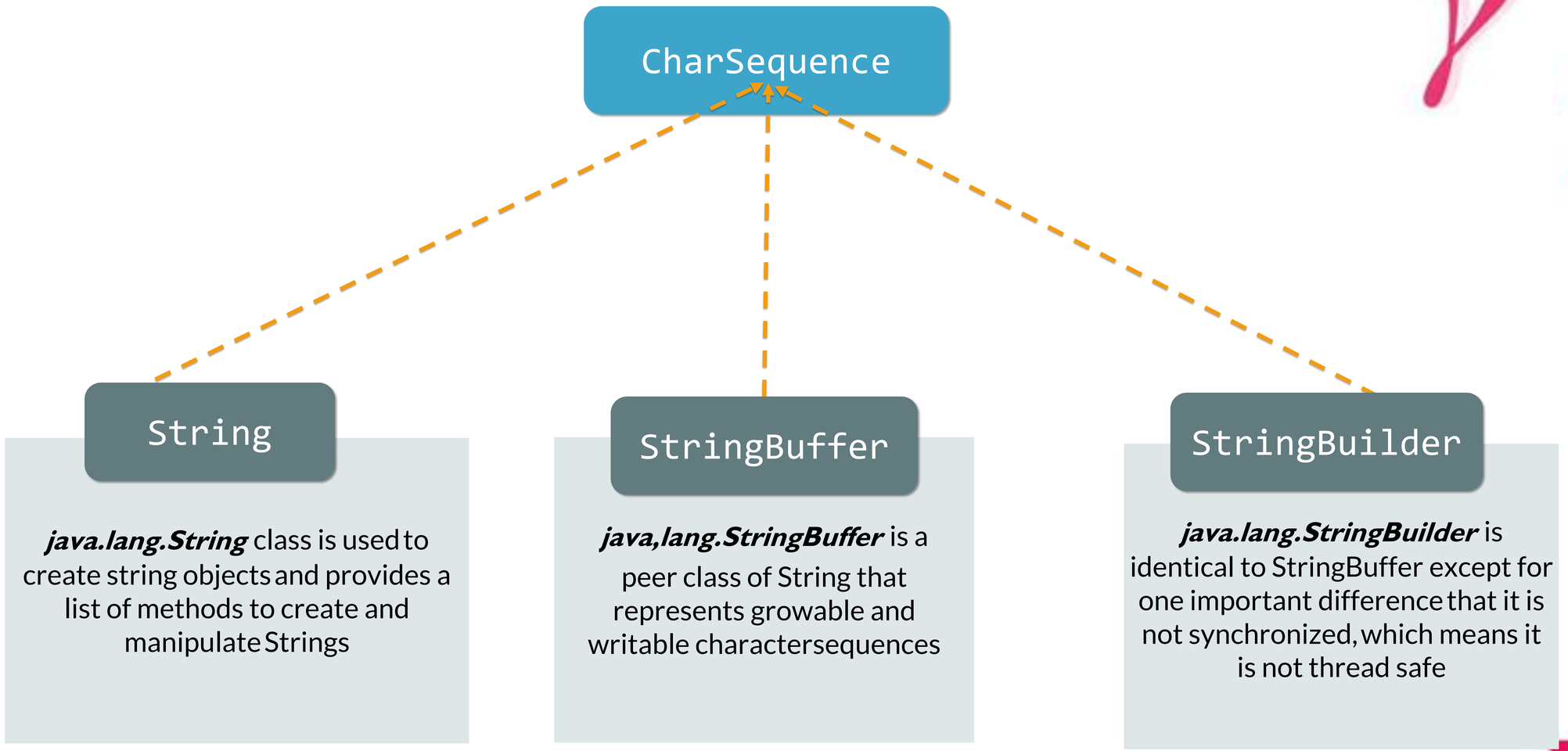



```
public final class String
    extends Object
        implements Serializable, Comparable<String>, CharSequence
```

Java Strings

`Serializable`	Serializable is a marker interface that contains no data member or method. It is used to “mark” the java classes so that objects of these classes may get a specific capability
`Comparable`	Comparable interface is used for ordering the objects of any user-defined class. This interface is found in **`java.lang.package`** and contains only one method named **`compareTo(Object)`**
`CharSequence`	A CharSequence interface is a readable sequence of characters. This interface provides uniform, read-only access to various kind of character sequences

Java Strings – Immutable and Mutable



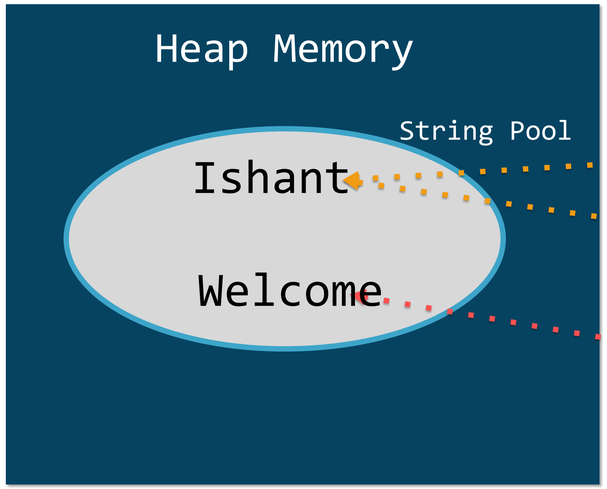
Creating a String

Creating a String – Using Literal

Java String literal is created by using double quotes

```
String str = “Ishant”;
```

Before creating a String literal, Java first looks for a String with same value in the String pool. If found, it returns the reference; else it creates a new String in the pool & returns the reference



str

str1

```
String str1 = “Ishant”;
```

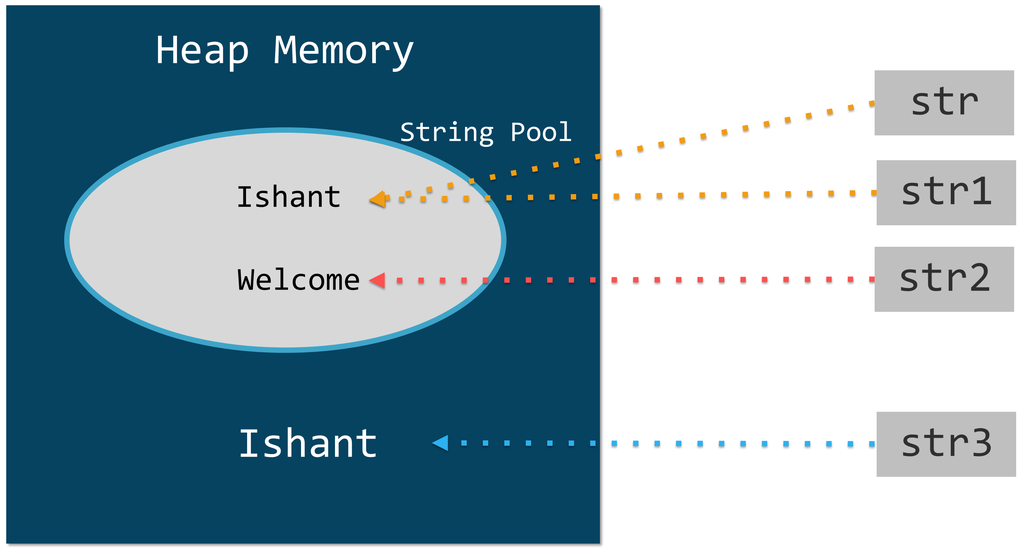
str2

```
String str2 = “Welcome”;
```

Creating a String – Using new Keyword

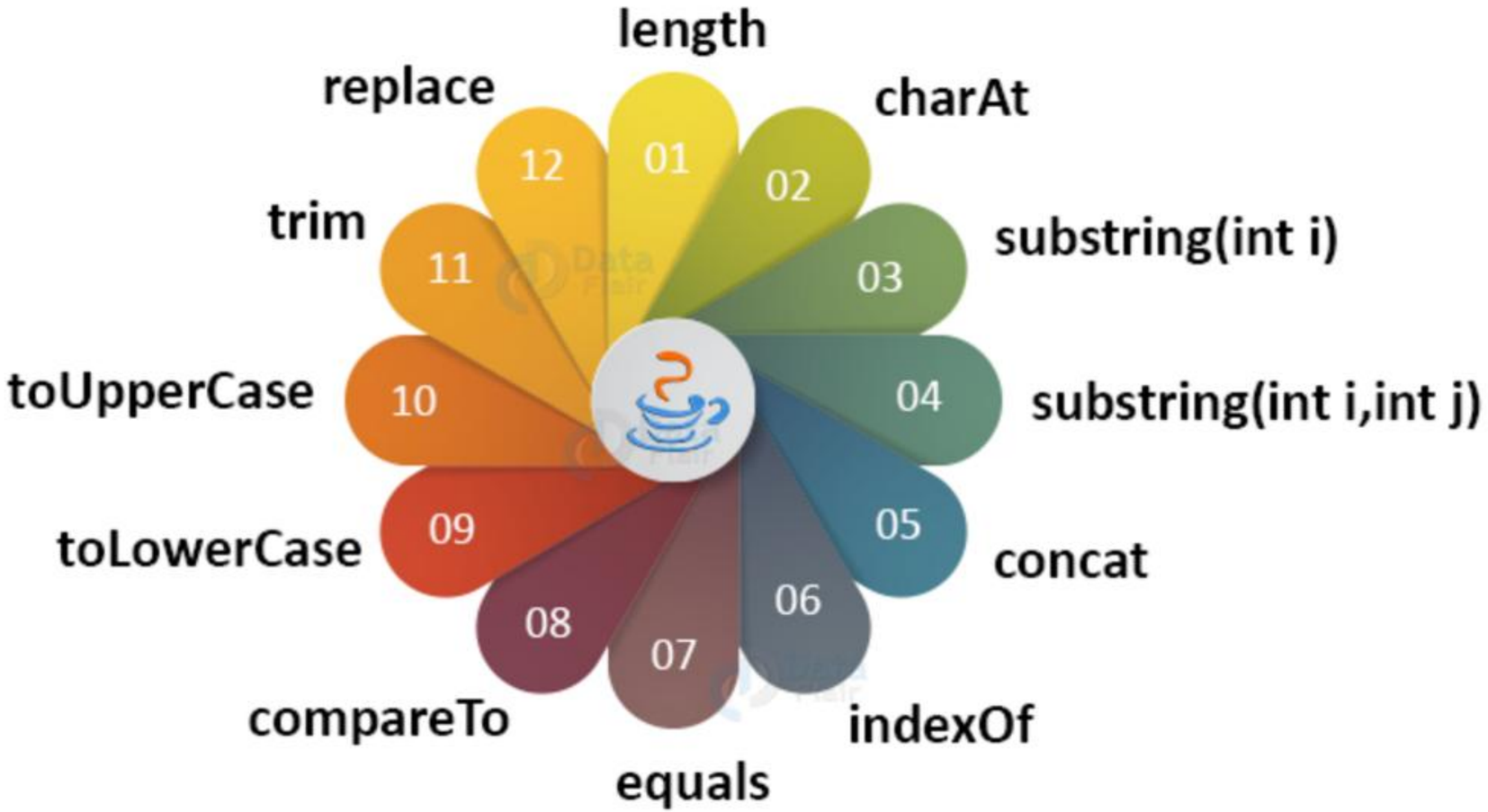
String object created using “new” keyword always creates a new object in heap memory

```
String str = new String (“Ishant”);
```



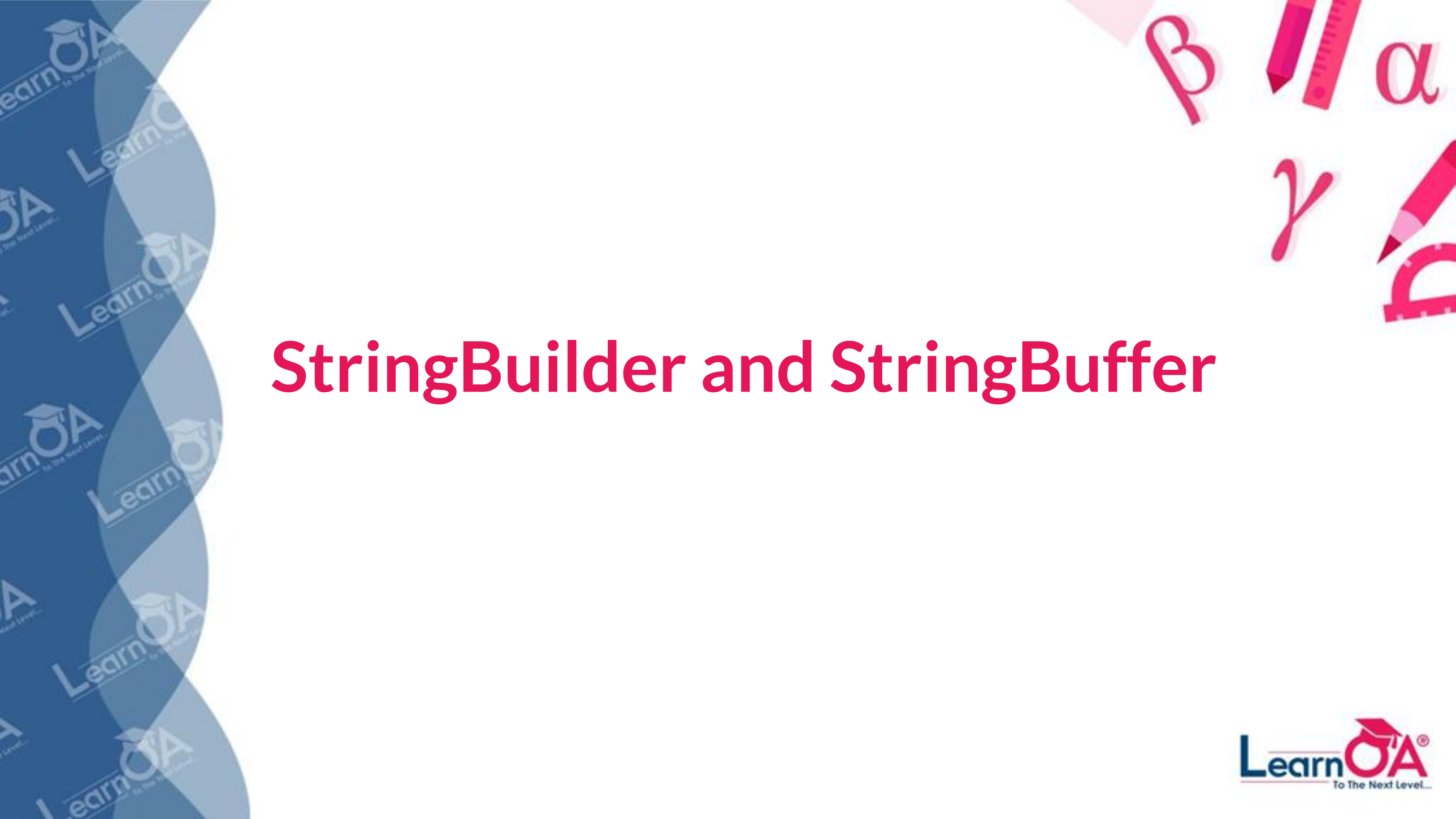
String Methods

String Methods



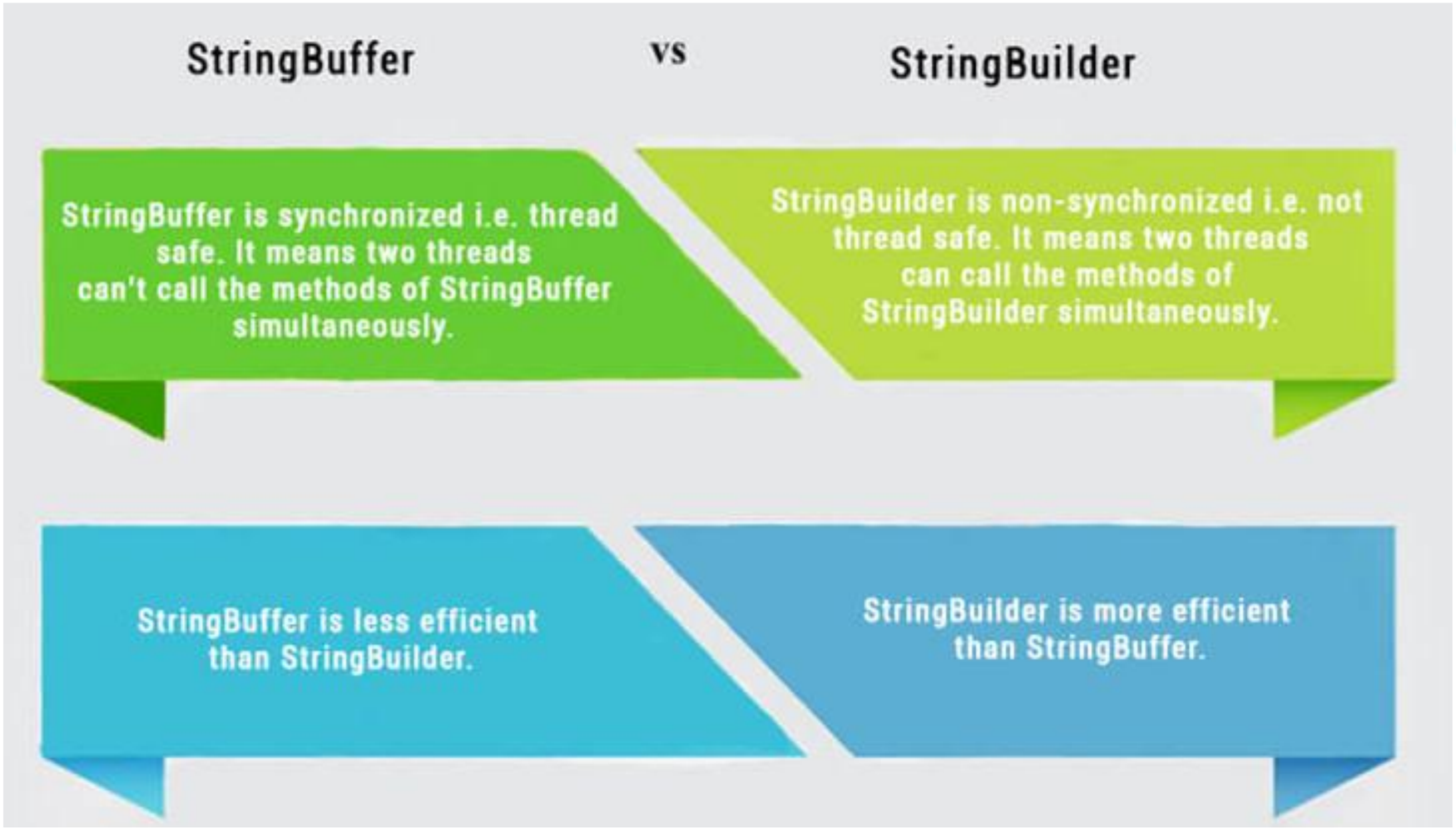
String Methods

boolean equals(Object another)	Checks the equality of string with the given object
equalsIgnoreCase()	Compares another string without matching the case
length()	Returns a strings length
charAt(i)	Returns a character at a index 'i'
toUpperCase()	Returns the string in uppercase
toLowerCase()	Returns the string in lowercase
replace(oldVal, newVal)	Replaces all occurrences of the specified char value with the given value
trim()	Removes the white spaces from the beginning and ending of string
contains("value")	Checks for the matching sequence of char value and returns true/false
toCharArray()	Converts a string to a new character array
IsEmpty()	Checks whether the string is empty or not
endsWith()	Checks if the string ends with the specified suffix
concat()	Concatenates two strings

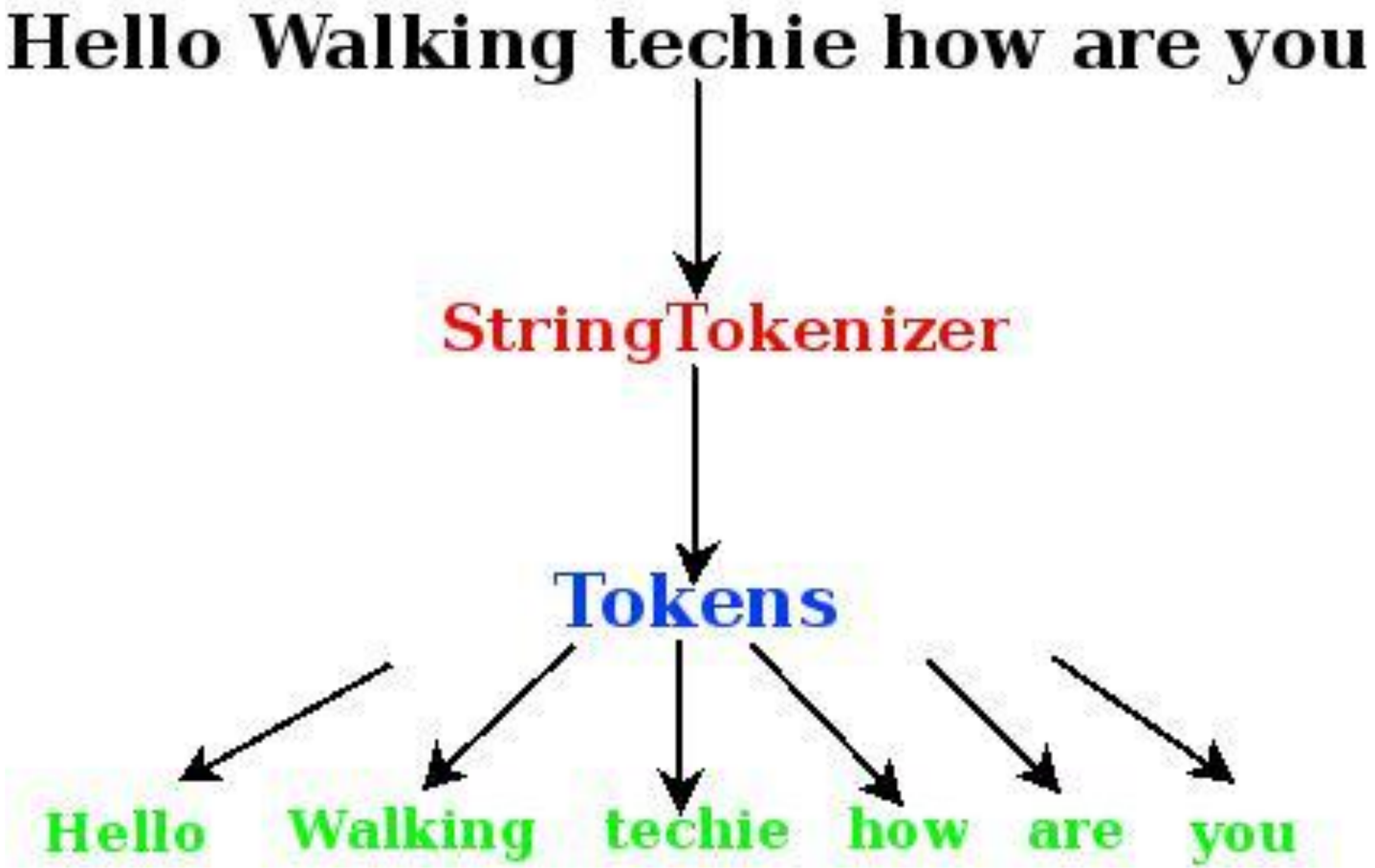


StringBuilder and StringBuffer

StringBuilder vs StringBuffer



StringTokenizer


Hello Walking techie how are you
StringTokenizer
Tokens
Hello
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Thank You!