Mutable String

Therefore mutable strings are those strings whose content can be changed without creating a new object. **StringBuffer and StringBuilder are mutable versions of String** in java.

StringBuffer Constructors:

- **StringBuffer():** This creates an empty StringBuffer with a default capacity of 16 characters.
- **StringBuffer(int capacity):** This creates an empty StringBuffer with a specified capacity.
- **StringBuffer(CharSequence charseq):** This creates a StringBuffer containing the same characters as in the specified character sequence.
- **StringBuffer(String str):** Creates a StringBuffer corresponding to specific string.

```
public class Demo{

	public static void main(String[] args) {
		StringBuffer st = new StringBuffer(); // Creating
object of StringBuffer
		System.out.println(st.capacity());// Initial default
capacity is 16
	}
}
```

Output:

16

In the above code StringBuffer object is created by default 16 memory is allocated.

Let's see how to append strings to StringBuffer.

```
public class Demo{

	public static void main(String[] args) {
		StringBuffer st = new StringBuffer();
		System.out.println(st.capacity());
		st.append("Java"); // Java is added to string Buffer
		st.append("JavaScript"); // JavaScript is added to
string Buffer
		System.out.println(st);
	}
}
```

Output:

```
16
JavaJavaScript
```

Let's see if you try to append the string more than the default capacity

```
public class Demo{

	public static void main(String[] args) {
		StringBuffer st = new StringBuffer();
		System.out.println(st.capacity());
		st.append("Java");
		st.append("JavaScript");
		System.out.println(st);
		st.append("James Gosling");
		System.out.println(st.capacity()); //once the capacity
is full size will be increase by (capacity*2)+2
	}
}
```

Output:

```
16
JavaJavaScript
34
```

If the size is larger than the size of characters then you can reduce the storage using trimToSize().

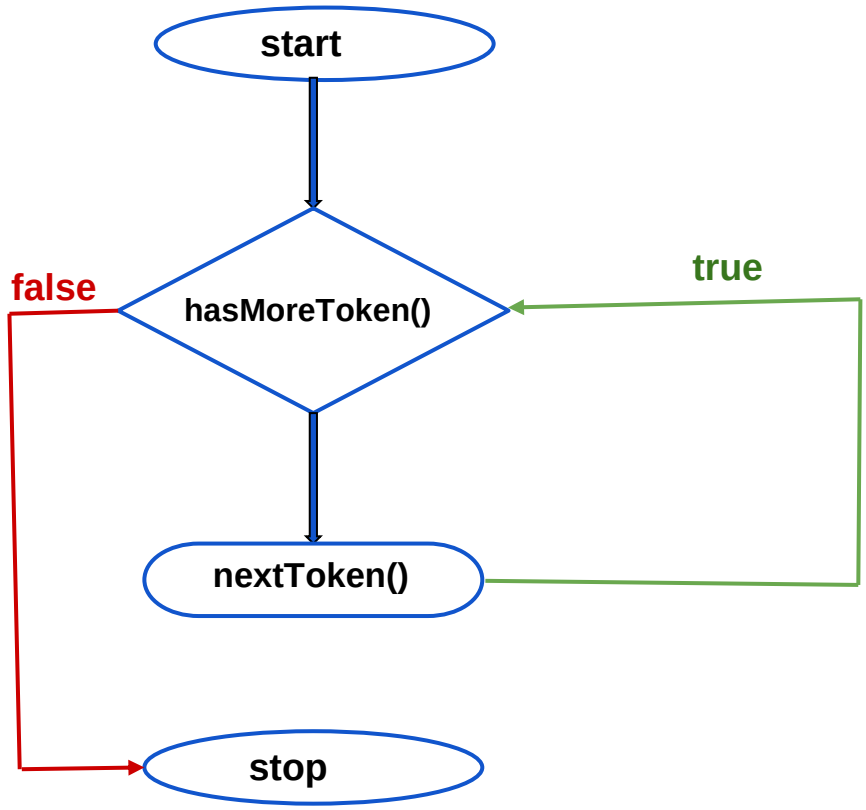
```
public class Demo{

	public static void main(String[] args) {
		StringBuffer st = new StringBuffer();
		System.out.println(st.capacity());
		st.append("Java");
		st.append("JavaScript");
		System.out.println(st);
		st.append("James Gosling");
		System.out.println(st.capacity());
		st.trimToSize();
		System.out.println(st.capacity());

	}
}
```

Output:

```
16
JavaJavaScript
34
27
```

String Tokenizer:

StringTokenizer class in Java is used to break a string into tokens.




```
import java.util.StringTokenizer;

public class Demo{
     public static void main(String[] args) {
          String s = "JAVA PYTHON SQL AI";
          StringTokenizer st = new StringTokenizer(s);

          while(st.hasMoreTokens()) {
               System.out.println(st.nextToken());
          }
     }
}
```

Output:

TAP ACADEMY

```
JAVA
PYTHON
SQL
AI
```