

## StringBuffer

```
class Test
{
    public static void main(String[] args)
    {
        StringBuffer sb = new StringBuffer("durga");
        System.out.println(sb.capacity());
    }
}
```

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### Some method of stringBuffer

```
public int length();
public int capacity();
public char charAt(int index);

StringBuffer sb = new StringBuffer("durga");
System.out.println(sb.charAt(3));g
System.out.println(sb.charAt(30));
RE: StringIndexOutOfBoundsException
```

```
public void setCharAt(int index, char ch);
    To replace the character locating at specified index with provided character
```

```
public StringBuffer append(String s);
```

```
(int i)  
(float f)  
(double d)  
(boolean b)  
(Object o)
```

```
;;
```

```
public StringBuffer insert(int index, String s);
```

```
(int index, int i)  
(int index, float f)  
(int index, double d)  
(int index, boolean b)  
(int index, Object o)
```

```
;;
```

```
public StringBuffer delete(int begin, int end)
```

To delete characters locating from begin index to end-1 index  
`public StringBuffer deleteCharAt(int index)`

```
public StringBuffer reverse();
```

```
public void setLength(int length);
```

```
StringBuffer sb = new StringBuffer("aiswaryaabhi");  
sb.setLength(8);  
System.out.println(sb); //aiswarya
```

```
public void trimToSize();  
    to deallocate extra allocated free memory
```

```
StringBuffer sb = new StringBuffer(1000);  
sb.append("abc");  
sb.trimToSize();  
System.out.println(sb.capacity()); //3
```

=====

```
public void ensureCapacity(int capacity);  
    to increase capacity on fly based on our requirement
```

```
StringBuffer sb = new StringBuffer();  
System.out.println(sb.capacity());  
sb.ensureCapacity(1000);  
System.out.println(sb.capacity());
```

### Difference between

String vs StringBuffer vs StringBuilder:

- 1. If the content is fixed and wont change frequently...String
- 2. If the content is not fixed and keep on changing, thread-safety is required  
StringBuffer
- 3. If the cotnent is not fixed and keep on changing but thread-safety is not re  
StringBuilder