

String **constructors** in Java.

◆ 1. Default Constructor (Deprecated – not used anymore)

// Not recommended in modern Java

```
String s = new String();  
System.out.println("Empty String: " + s + "");
```

👉 Creates an **empty string** `""`.

(Usually we just use `""` instead of this constructor.)

◆ 2. String(byte[] bytes)

Creates a string from a **byte array** (using platform's default charset).

```
class StringFromBytes {  
    public static void main(String[] args) {  
        byte[] bytes = {65, 66, 67, 68}; // ASCII values  
        String s = new String(bytes);  
        System.out.println(s); // Output: ABCD  
    }  
}
```

◆ 3. String(byte[] bytes, int offset, int length)

Creates a string from a portion of a byte array.

```
class StringFromBytesPart {  
    public static void main(String[] args) {  
        byte[] bytes = {65, 66, 67, 68, 69};  
        String s = new String(bytes, 1, 3); // start=1, length=3  
        System.out.println(s); // Output: BCD  
    }  
}
```

◆ 4. String(char[] value)

Creates a string from a character array.

```
class StringFromChars {  
    public static void main(String[] args) {  
        char[] chars = {'J', 'a', 'v', 'a'};  
        String s = new String(chars);  
        System.out.println(s); // Output: Java  
    }  
}
```

◆ 5. String(char[] value, int offset, int count)

Creates a string from a portion of a character array.

```
class StringFromCharsPart {  
    public static void main(String[] args) {  
        char[] chars = {'H', 'e', 'l', 'l', 'o'};  
        String s = new String(chars, 1, 3); // start=1, count=3  
        System.out.println(s); // Output: ell  
    }  
}
```

◆ 6. String(StringBuffer buffer)

Creates a string from a `StringBuffer` object.

```
class StringFromBuffer {  
    public static void main(String[] args) {  
        StringBuffer sb = new StringBuffer("Hello World");  
        String s = new String(sb);  
        System.out.println(s); // Output: Hello World  
    }  
}
```

◆ 7. String(StringBuilder builder)

Creates a string from a `StringBuilder` object.

```
class StringFromBuilder {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder("Java Rocks");
        String s = new String(sb);
        System.out.println(s); // Output: Java Rocks
    }
}
```

Summary of String Constructors

Constructor	Example Use
<code>String()</code>	Creates empty string
<code>String(byte[])</code>	From byte array
<code>String(byte[], int, int)</code>	From part of byte array
<code>String(char[])</code>	From char array
<code>String(char[], int, int)</code>	From part of char array
<code>String(StringBuffer)</code>	From <code>StringBuffer</code>
<code>String(StringBuilder)</code>	From <code>StringBuilder</code>
<code>String(byte[], Charset)</code>	From byte array with charset
