



Lecture – 17

Strings in Java



List of Concepts Involved:

- Mutable String
- StringBuffer vs StringBuilder
- Inbuilt Methods

Topics covered Yesterday's Session:

- Reversing String Different cases
- Palindrome
- Anagram program
- Pangram program

Mutable String

Mutable String

Once if we create a String, on that String if we try to perform any operation and if those changes get reflected in the same object then such strings are called “Mutable String”.

Example: StringBuffer, StringBuilder

StringBuffer and StringBuilder

StringBuffer

- If the content will change frequently then it is not recommended to go for String object becoz for every new change a new Object will be created.
- To handle this type of requirement, we have a **StringBuffer/StringBuilder** concept.

1. **StringBuffer sb=new StringBuffer();**

- Creates an empty StringBuffer object with default initial capacity of "16".
- Once StringBuffer reaches its maximum capacity a new StringBuffer Object will be created.

new capacity = (current capacity+1)* 2;

Important methods of StringBuffer

- `public int length()`
- `public int capacity()`
- `public char charAt(int index)`
- `public void setCharAt(int index, char ch)`
- `public StringBuffer append(String s)`
- `public StringBuffer append(int i)`
- `public StringBuffer append(long l)`
- `public StringBuffer append(boolean b)`
- `public StringBuffer append(double d)`
- `public StringBuffer append(float f)`
- `public StringBuffer append(int index, Object o)`

StringBuilder(1.5v)

StringBuilder is same as StringBuffer(1.0v) with few differences

StringBuilder

- No methods are synchronized
- At a time more than one thread can operate so it is not ThreadSafe.
- Threads are not required to wait so performance is high.
- Introduced in jdk1.5 version

String vs StringBuffer vs StringBuilder

String

we opt if the content is fixed and it wont change frequently

StringBuffer

we opt if the content changes frequently but ThreadSafety is required

StringBuilder

we opt if the content changes frequently but ThreadSafety is not required

Next Lecture

- Static keyword
- Class loading and How java program actually executes
- Different components in Java program



▶ THANK YOU ◀