Important Constructors and Methods of StringBuilder class

Constructors of StringBuilder class:

1. **StringBuilder():** It creates an empty string builder with an initial capacity of 16.

2. **StringBuilder(String str):** It creates a string builder with the given string.

3. **StringBuilder(CharSequence seq):** It Constructs a string builder that contains the same characters as the specified CharSequence.

4. **StringBuilder(int capacity):** It creates an empty string builder with the specified capacity as length.

Methods of StringBuilder class:

1. **append(datatype varname):** The append() method concatenates the given argument with this string.

```
class A {
   public static void main(String[] args)
   {
      StringBuilder sb = new StringBuilder("Red ");
      sb.append("Apple"); // now original string is changed
      System.out.println(sb);
   }
}
```

Output

```
Red Apple
```

2. **insert(int offset, datatype varname):** The insert() method inserts the given argument at the given position

```
class A {
   public static void main(String args[])
   {
      StringBuilder sb = new StringBuilder("ABCD ");
      sb.insert(1, "PQR");
      // Now original string is changed
      System.out.println(sb);
   }
}
```

Output

APQRBCD.

3. **replace(int start, int end, String str):** The replace() method replaces the given string from the specified beginIndex up to endIndex-1.

```
class A {
   public static void main(String args[])
   {
      StringBuilder sb = new StringBuilder("Hello");
      sb.replace(1, 3, "Mohan");
      System.out.println(sb);
   }
}
```

Output
HMohanlo

4. **delete(int start, int end):** The delete() method of the StringBuilder class deletes the string from the specified beginIndex to endIndex-1.

```
class A {
   public static void main(String args[])
   {
     StringBuilder sb = new
StringBuilder("Hello");
      sb.delete(1, 3);
      System.out.println(sb);
   }
}
```

Output

Hlo

5. **reverse():** The The reverse() method of the StringBuilder class reverses the current string.

```
class A {
   public static void main(String args[])
   {
      StringBuilder sb = new
StringBuilder("Hello");
      sb.reverse();
      System.out.println(sb);
   }
}
Output
olleH
```

6. **capacity():** The capacity() method of the StringBuilder class returns the current capacity of the buffer.

   The default capacity of the buffer is 16. If the number of characters increases from its current capacity, it increases the capacity by (oldcapacity*2)+2.

For instance, if your current capacity is 16, it will be (16*2)+2=34.

```
class A {
   public static void main(String args[])
   {
       StringBuilder sb = new StringBuilder();
      System.out.println(sb.capacity()); // default 16
      sb.append("Hello");
      System.out.println(sb.capacity()); // now 16
      sb.append("Mohan is writing a code in java");
      System.out.println(sb.capacity());
      // Now (16*2)+2=34    i.e (oldcapacity*2)+2
   }
}
Output
16
16
34
```

7. **ensureCapacity(int min) ():** This method ensures that the StringBuilder capacity is at least equal to the mentioned minimum.

8. **charAt(index):** It will return the character at the specified index.

9. **length():** The length of a StringBuilder can be found by the length( ) method.