

1. What is Mutable String in Java Explain with an example?

Ans – Mutable String means the value of string can be changed without changing the string object or without creating a new object of string.

It can be achieved in java with two classes

- **StringBuilder**
>StringBuilder, on the other hand, is not thread-safe. It is faster because it lacks synchronization overhead. Use it in single-threaded environments or where thread safety isn't critical
- **StringBuffer**
>StringBuffer is synchronized and therefore thread-safe. Multiple threads can safely access and modify a StringBuffer instance.

Example

```
public class Demo {  
    public static void main(String[] args) {  
        StringBuffer sb = new StringBuffer("Ram");  
        // StringBuffer sb="";//invalid  
        System.out.println(sb);  
        sb.append(" Yadav");  
        System.out.println(sb);  
  
        StringBuilder sb1 = new StringBuilder("Ram ");  
        System.out.println(sb1);  
        sb1.append("Yadav");  
        System.out.println(sb1);  
    }  
}
```

2. WAP to reverse a String

Input = "PWSKILLS"

Output= "SLLIKSPW"

Ans

```
public class Demo {  
    public static void main(String[] args) {  
        String str1 = "PWSKILLS";  
        String str2 = "";  
        for (int i=str1.length()-1; i>=0;i--) {  
            str2= str2+str1.charAt(i);  
        }  
        System.out.println("Bfore reversing "+ str1);  
        System.out.println("After reversing "+ str2);  
    }  
}
```

3. WAP to reverse a sentence while preserving the position

Input= "Think Twice"

Output= "kniht eciwt"

Ans

```
public class Demo {  
    public static void main(String[] args) {  
        String str1 = "Think Twice";  
        String str2 = "";  
        String sarr[] = str1.split(" ");  
  
        for (String A : sarr) {  
            for (int i = A.length() - 1; i >= 0; i--) {
```

```

        str2 = str2 + A.charAt(i);

    }

    str2 = str2 + " ";

}

System.out.println("Bfore reversing " + str1);
System.out.println("After reversing " + str2);

}

}

```

4. WAP to sort a String Alphabetically

Ans

```

import java.util.Arrays;

public class Demo {

    public static void main(String[] args) {

        String str1 = "hello friends ";
        char str2[]=str1.toCharArray();
        Arrays.sort(str2);
        System.out.println(str2);

    }

}

```