1. What is a Mutable String in java Explain with an example

Ans: A Mutable String can change the contents of an existing object, which does not create a new object.

Ex: StringBuilder, StringBuffer.

2. WAP to reverse a String

I/P: "PWSKILLS"
O/P: "SLLIKSWP"

```
public class lecture_17 {
   public static void main(String[] args) {
      String str1 = "PWSKILLS";
      String str2 = " ";
      for(int i=str1.length()-1; i>=0; i--){
            str2+= str1.charAt(i);
      }
      System.out.println(str2);
   }
}
```

3. WAP to reverse a sentence while preserving the position

I/P: Think Twice

O/P: "kniht eciwt"

```
public class lecture_17 {
   public static void main(String[] args) {
      String str1="Think Twice";
      str1 = str1.toLowerCase();
      String str2="";
      String arr[]= str1.split(" ");
      for (String elem : arr){
            for(int i=elem.length()-1 ; i>=0; i--)
            {
                  str2=str2+elem.charAt(i);
            }
            str2 = str2+ " ";
      }

      System.out.println("Before Reversing: " + str1);
      System.out.println("After Reversing: " + str2);
    }
}
```

4. WAP to sort a String Alphabetically

```
import java.util.Locale;

public class lecture_17 {
    public static void main(String[] args) {

    String str = "Alphabetically";
    str = str.toLowerCase();
        char []ch=str.toCharArray();
        Arrays.sort(ch);
    System.out.println(ch);
}
```