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<b>Experiment No.</b>	6-A

<b>PROBLEM STATEMENT :</b>	Write a program which will read a string and rewrite it in the alphabetical order. For example, the word STRIN should be written as GINRST
<b>THEORY:</b>	<p><b>Some key points about strings in Java:</b></p> <p><b><u>1. String Creation:</u></b>  In Java, strings can be created using string literals or the `String` class constructor. String literals are created by enclosing characters within double quotes (" "):  <pre> ...  String str1 = "Hello"; // Using string literal String str2 = new String("World"); // Using the String class constructor ... </pre> </p> <p><b><u>2. String Immutability:</u></b>  In Java, strings are immutable, meaning their values cannot be changed once created. Any operation that appears to modify a string actually creates a new string. For example:  <pre> ...  String str = "Hello"; str = str + " World"; // Creates a new string, "Hello World" ... </pre> </p> <p><b><u>3. Concatenating Strings:</u></b>  Strings can be concatenated using the `+` operator or the `concat()` method:  <pre> ...  String fullName = str1 + " " + str2; // Using the '+' operator String concatenated = str1.concat(str2); // Using the 'concat()' method ... </pre> </p> <p><b><u>4. String Length:</u></b>  The length of a string can be obtained using the `length()` method:  <pre> ... </pre> </p>

	<pre>int length = fullName.length(); // Returns the length of the string ...</pre> <p><b><u>5. Accessing Characters:</u></b></p> <p>Individual characters of a string can be accessed using the `charAt()` method:</p> <pre>...</pre> <pre>char firstChar = fullName.charAt(0); // Retrieves the character at index 0 ...</pre>
<b>PROGRAM:</b>	<pre>import java.util.Arrays; import java.util.Scanner;  public class Stringhandling{     public static void main(String[] args) {         System.out.println("Enter a string:");         Scanner sc=new Scanner(System.in);         String s=sc.next();         int temp,j;         int[] strarr=new int[s.length()];         for(int i=0;i&lt;s.length();i++){             strarr[i]=(int)s.charAt(i);         }         for(int i=1;i&lt;s.length();i++){             temp=strarr[i];             j=i;             while(strarr[j-1]&gt;temp){                 strarr[j]=strarr[j-1];                 j--;                 if(j==0){                     break;                 }             }             strarr[j]=temp;         }         String snew=new String();         char string_buffer;         for(int i=0;i&lt;s.length();i++){             string_buffer=(char)strarr[i];             snew=snew+string_buffer;         }         System.out.println("The string sorted in alphabetical order is: "+snew);         sc.close();     } }</pre>

```
Enter a string:
```

```
shubhan
```

```
The string sorted in alphabetical order is: abhhnsu
```

**RESULT:** `Process finished with exit code 0`