String In Java

1.Write a simple string program to take input from user

The nextLine() method of Scanner class is used to take a string from the user. It is defined in java.util.Scanner class. The nextLine() method reads the text until the end of the line. After reading the line, it throws the cursor to the next line.
The signature of the method is:

1. public String nextLine()

The method returns the line that was skipped. It does not accept any parameter. When it does not find any line, then it throws NoSuchElementException. It also throws IllegalStateException if the scanner is closed.
Example of nextLine() method

```
import java.util.*;
class UserInputDemo1
{
public static void main(String[] args)
{
string sc = new string(System.in);
System.out.print("Enter a string: ");
String str= sc.nextLine();
System.out.print("You have entered: "+str);
}
}
```

2.How do you concatenate two strings in java?Give an example?

In Java, String concatenation forms a new String that is the combination of multiple strings. There are two ways to concatenate strings in Java:

1. By + (String concatenation) operator
2. By concat() method

+ (String concatenation) operator

```
class TestStringConcatenation2{
 public static void main(String args[]){
   String s=50+30+"Sachin"+40+40;
   System.out.println(s);
 }
}
```

output:-**80Sachin4040**

By concat() method

```
class TestStringConcatenation3{
 public static void main(String args[]){
   String s1="Sachin ";
   String s2="Tendulkar";
   String s3=s1.concat(s2);
   System.out.println(s3);//Sachin Tendulkar
  }
}
```

output:-**Sachin Tendulkar**

3.How do you find the length of a string in java Explain with an example?

To calculate the length of a string in Java, you can use an inbuilt length() method of the Java string class.

In Java, strings are objects created using the string class and the length() method is a public member method of this class. So, any variable of type string can access this method using the . (dot) operator.

The length() method counts the total number of characters in a String.

The signature of the length() method is as follows:

```
public int length()
```

The return type of the length() method is int.

Let’s calculate & print out the length of a string using the length() method.

```
class CalcLength {
   public static void main( String args[] ) {
      String name = "educative";
      int length = name.length();
      System.out.println("The length of the String \""+name+"\" is: " +length);    }
}
```

The length of the string name is 9:

4.How do you compare two strings in java? Give an example?

We can compare String in Java on the basis of content and reference.
It is used in authentication (by equals() method), sorting (by compareTo() method), reference matching (by == operator) etc.
There are three ways to compare String in Java:

1. By Using equals() Method
2. By Using == Operator
3. By compareTo() Method

1) By Using equals() Method

The String class equals() method compares the original content of the string. It compares values of string for equality. String class provides the following two methods:

- public boolean equals(Object another) compares this string to the specified object.
- public boolean equalsIgnoreCase(String another) compares this string to another string, ignoring case.

2) By Using == operator

The == operator compares references not values.

3) String compare by compareTo() method

The String class compareTo() method compares values lexicographically and returns an integer value that describes if first string is less than, equal to or greater than second string.
Suppose s1 and s2 are two String objects. If:

- s1 == s2 : The method returns 0.
- s1 > s2 : The method returns a positive value.
- s1 < s2 : The method returns a negative value.

5.Write a program to find the length of the string “refrigerator”?

```
class HelloWorld {
   public static void main(String[] args)
   {
   String str = "refrigerator";
    System.out.println(str.length());

   }
}
```

6.Write a program to check if the letter ‘e’ is present in the word ‘umbrella’?

```
class HelloWorld {
    public static void main(String[] args)
    {
    String str = "umbrella";
char cArray[]=str.toCharArray();
Boolean per= false;
for(int i=0; i<cArray.length; i++ )
{
    if (cArray[i]=='e');
       {
        per=true;
        break;
       }

}


     System.out.println(per);

    }
}
```

7.Write a program to delete all consonants from the string “Hello, have a good day”.

```
  public static void main(String args[])
    {
    String s;
    int j=0;
    System.out.println("Enter a string");
    Scanner so=new Scanner(System.in);
    s= so.nextLine();
    char ch[]=new char[20];
    for(int i=0;i<s.length();i++)
    {
    if(s.charAt(i)=='a'|| s.charAt(i)=='A'||s.charAt(i)=='e'||
s.charAt(i)=='E'||s.charAt(i)=='i'|| s.charAt(i)=='I'||s.charAt(i)=='o'||
s.charAt(i)=='O'||s.charAt(i)=='U'|| s.charAt(i)=='u')
    {
    ch[j++]=s.charAt(i);

    }
          else

          {
          continue;
          }
    }
    for(int i=0;i<j;i++)
    {
    System.out.print(ch[i]);
    }
    System.out.println();
}
}
```