

Name	Shubhan Singh
UID no.	2022300118
Experiment No.	6-B

PROBLEM STATEMENT :	Write a program to extract a portion of character string and print the extracted string. Assume that m characters are extracted, starting with the n th character. so take m and n as user input. No use of inbuilt functions.
THEORY:	<p><u>STRING BUFFER IN JAVA:</u></p> <p>In Java, the `StringBuffer` class is used to create mutable strings. It provides methods to modify and manipulate the content of a string. The `StringBuffer` class is part of the `java.lang` package and is similar to the `String` class, but with the ability to modify the content without creating a new object each time.</p> <p>Here are some important points to know about `StringBuffer`:</p> <p><u>1. Creating a StringBuffer:</u></p> <p>You can create a `StringBuffer` object using its constructor:</p> <pre> ... StringBuffer sb = new StringBuffer(); // Creates an empty StringBuffer StringBuffer sb2 = new StringBuffer("Hello"); // Creates a StringBuffer with initial content "Hello" ... </pre> <p><u>2. Modifying a StringBuffer:</u></p> <p>The `StringBuffer` class provides methods to append, insert, replace, and delete characters in the buffer. Some commonly used methods are:</p> <ul style="list-style-type: none"> - `append()`: Appends the specified string or other data types to the existing content. - `insert()`: Inserts the specified string or other data types at a specific position in the buffer. - `replace()`: Replaces a specific range of characters with the specified string. - `delete()`: Deletes a specific range of characters from the buffer. - `reverse()`: Reverses the order of characters in the buffer.

	<p>Here's an example demonstrating some of these methods:</p> <pre> ... StringBuffer sb = new StringBuffer("Hello"); sb.append(" World"); // Appends " World" to the existing content sb.insert(5, " Java"); // Inserts " Java" at index 5 sb.replace(6, 11, "Coders"); // Replaces "World" with "Coders" starting from index 6 to 10 sb.delete(0, 5); // Deletes characters from index 0 to 4 sb.reverse(); // Reverses the content of the buffer System.out.println(sb.toString()); // Outputs "sredoC avaJ" </pre>
PROGRAM:	<pre> import java.util.Scanner; public class trimstr{ public static void main(String[] args) { Scanner sc = new Scanner(System.in); System.out.println("Enter a string:"); String s=sc.nextLine(); int m,n; System.out.println("Enter number of chracters in extracted string:"); m=sc.nextInt(); System.out.println("Enter the position of starting character in extracted string:"); n=sc.nextInt(); String newstr=new String(); for(int i=0;i<m;i++){ newstr=newstr+s.charAt(i+n-1); } System.out.println("The trimmed string is: "+newstr); } } </pre>

Enter a string:

Shubhan

Enter number of chracters in extracted string:

4

Enter the position of starting character in extracted string:

3

The trimmed string is: ubha

Process finished with exit code 0

RESULT: