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| **Experiment No.** | 6-B |

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| **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 inbuild functions.** |
| **THEORY:** | **STRING BUFFER IN JAVA:**  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.  Here are some important points to know about `StringBuffer`:  **1. Creating a StringBuffer:**  You can create a `StringBuffer` object using its constructor:  ```  StringBuffer sb = new StringBuffer(); // Creates an empty StringBuffer  StringBuffer sb2 = new StringBuffer("Hello"); // Creates a StringBuffer with initial content "Hello"  ```  **2. Modifying a StringBuffer:**  The `StringBuffer` class provides methods to append, insert, replace, and delete characters in the buffer. Some commonly used methods are:  - `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.  Here's an example demonstrating some of these methods:  ```  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" |
| **PROGRAM:** | 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);  } } |
| **RESULT:** | |