Lab-2

SURESH K COMPUTER SCIENCE

“We realizes that while our workers were thriving, the surrounding villages were still suffering. It became our goal to uplift their quality of life as well. I remember seeing a family of 4 on a motorbike in the heavy Bombay rain — I knew I wanted to do more for these families who were risking their lives for lack of an alternative” The alternative mentioned here is the Tata Nano, which soon after came as the world’s cheapest car on retail at a starting price of only Rs 1 lakh. These were the words of Ratan Tata in a recent post by Humans of Bombay which formed the basis of his decision to come up with a car like Tata Nano.”  
  
Write a Java Program to implement the following methods from String  with the above text.  
  
Java String Methods  
String charAt()  
String compareTo()  
String concat()  
String contains()  
String endsWith()  
String equals()  
equalsIgnoreCase()  
String format()  
String getBytes()  
String getChars()  
String indexOf()  
String intern()  
String isEmpty()  
String join()  
String lastIndexOf()  
String length()  
String replace()  
String replaceAll()  
String split()  
String startsWith()  
String substring()  
String toCharArray()  
String toLowerCase()  
String toUpperCase()  
String trim()  
String valueOf()

import java.util.Arrays;

public class lab2 {

public static void main(String[] args) {

String text = "We realizes that while our workers were thriving, the surrounding villages were still suffering. It became our goal to uplift their quality of life as well. I remember seeing a family of 4 on a motorbike in the heavy Bombay rain — I knew I wanted to do more for these families who were risking their lives for lack of an alternative";

// charAt()

char firstChar = text.charAt(0);

System.out.println("charAt(0): " + firstChar);

// compareTo()

String anotherText = "Comparing text";

int comparisonResult = text.compareTo(anotherText);

System.out.println("compareTo(anotherText): " + comparisonResult);

// concat()

String concatenatedText = text.concat(". Concatinating text.");

System.out.println("concat(): " + concatenatedText);

// contains()

boolean containsResult = text.contains("thriving");

System.out.println("contains('thriving'): " + containsResult);

// endsWith()

boolean endsWithResult = text.endsWith("alternative");

System.out.println("endsWith('alternative'): " + endsWithResult);

// equals()

boolean equalsResult = text.equals(anotherText);

System.out.println("equals(anotherText): " + equalsResult);

// equalsIgnoreCase()

boolean equalsIgnoreCaseResult = text.equalsIgnoreCase(anotherText);

System.out.println("equalsIgnoreCase(anotherText): " + equalsIgnoreCaseResult);

// format()

String formattedText = String.format("Formatted text: %s, %d", "Hello", 123);

System.out.println("format(): " + formattedText);

// getBytes()

byte[] bytes = text.getBytes();

System.out.println("getBytes(): " + bytes.length + " bytes");

// getChars()

char[] charArray = new char[20];

text.getChars(5, 25, charArray, 0);

System.out.println("getChars(): " + new String(charArray));

// indexOf()

int indexOfThriving = text.indexOf("thriving");

System.out.println("indexOf('thriving'): " + indexOfThriving);

// intern()

String internedText = text.intern();

System.out.println("intern(): " + (text == internedText));

// isEmpty()

boolean isEmptyResult = text.isEmpty();

System.out.println("isEmpty(): " + isEmptyResult);

// join()

String joinedText = String.join(" ", "Join", "this", "text");

System.out.println("join(): " + joinedText);

// lastIndexOf()

int lastIndexOfTh = text.lastIndexOf("th");

System.out.println("lastIndexOf('th'): " + lastIndexOfTh);

// length()

int textLength = text.length();

System.out.println("length(): " + textLength);

// replace()

String replacedText = text.replace("thriving", "flourishing");

System.out.println("replace('thriving', 'flourishing'): " + replacedText);

// replaceAll()

String replacedAllText = text.replaceAll("\\b\\w{4}\\b", "\*\*\*\*");

System.out.println("replaceAll('\\b\\w{4}\\b', '\*\*\*\*'): " + replacedAllText);

// split()

String[] splitText = text.split("\\s+");

System.out.println("split('\\s+'): " + Arrays.toString(splitText));

// startsWith()

boolean startsWithResult = text.startsWith("We");

System.out.println("startsWith('We'): " + startsWithResult);

// substring()

String substringText = text.substring(10, 30);

System.out.println("substring(10, 30): " + substringText);

// toCharArray()

char[] charArrayText = text.toCharArray();

System.out.println("toCharArray(): " + Arrays.toString(charArrayText));

// toLowerCase()

String lowercaseText = text.toLowerCase();

System.out.println("toLowerCase(): " + lowercaseText);

// toUpperCase()

String uppercaseText = text.toUpperCase();

System.out.println("toUpperCase(): " + uppercaseText);

// trim()

String trimmedText = " Trimmed Text ".trim();

System.out.println("trim(): '" + trimmedText + "'");

// valueOf()

int number = 42;

String valueOfString = String.valueOf(number);

System.out.println("valueOf(42): " + valueOfString);

}

}





