Lab-1

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```
1    class StrMethod{
2        public static void main(String[] args){
3            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";
4
5            char result = text.charAt(0);
6            System.out.println("CharAt:");
7            System.out.println(result);
8
9            System.out.println("compareTo:");
10           String text1="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";
11           System.out.println(text.compareTo(text1));
12
13           System.out.println("concat:");
14           System.out.println(text.concat(text1));
15
16           System.out.println("contains:");
17           System.out.println(text.contains("realizes"));
18           System.out.println(text.contains("e"));
19           System.out.println(text.contains("Hi"));
20
21           System.out.println("endswith:");
22           System.out.println(text.endsWith("ive"));
23           System.out.println(text.endsWith("alternative"));
24           System.out.println(text.endsWith("how"));
25
```
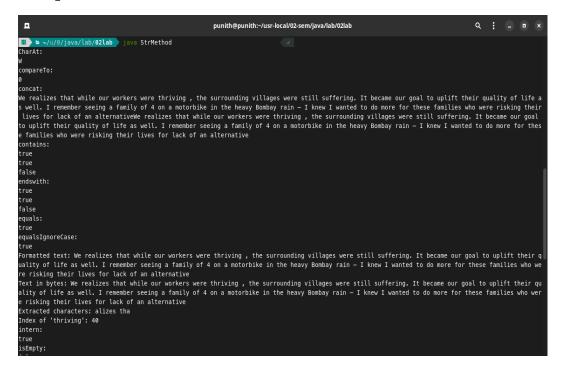
```java
            System.out.println("equals:");
            System.out.println(text.equals(text1));

            System.out.println("equalsIgnoreCase:");
            System.out.println(text.equalsIgnoreCase(text1));

            // format()
            String formattedText = String.format("Formatted text: %s",
                text);
            System.out.println(formattedText);

            // getBytes()
            byte[] textBytes = text.getBytes();
            System.out.println("Text in bytes: " + new String(textBytes));

            // getChars()
            char[] charArray = new char[10];
            text.getChars(5, 15, charArray, 0);
            System.out.println("Extracted characters: " + new
                String(charArray));

            // indexOf()
            int indexOfThriving = text.indexOf("thriving");
            System.out.println("Index of 'thriving': " + indexOfThriving);


            System.out.println("intern:");
            String str = new String("We realizes that while our workers
                were thriving").intern();
            String str1 = new String("We realizes that while our workers
                were thriving").intern();
            System.out.println(str1 == str);

            System.out.println("isEmpty:");
            String str2 = new String("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");
            String str3 = new String("");
            System.out.println(str2.isEmpty());
            System.out.println(str3.isEmpty());


            String[] words = text.split(" ");
            String joinedText = String.join("-", words);
            System.out.println("Joined text: " + joinedText);
```

```java
        // lastIndexOf()
        int lastIndexOfVillages = text.lastIndexOf("villages");
        System.out.println("Last index of 'villages': " +
            lastIndexOfVillages);

        // length()
        int textLength = text.length();
        System.out.println("Text length: " + textLength);

        // replace()
        String replacedText = text.replace("thriving", "prospering");
        System.out.println("Replaced text: " + replacedText);

        // replaceAll()
        String regexReplacedText = text.replaceAll("[0-9]", "X");
        System.out.println("Regex replaced text: " +
            regexReplacedText);

        // split()
        String[] sentences = text.split("\\.");
        System.out.println("Sentences: ");
        for (String sentence : sentences) {
            System.out.println(sentence.trim());
        }

        // startsWith()
        boolean startsWithWe = text.startsWith("We");
        System.out.println("Starts with 'We': " + startsWithWe);

        // substring()
        String substring = text.substring(0, 20);
        System.out.println("Substring: " + substring);

        // toCharArray()
        char[] charArray10 = new char[10]; // Rename the variable
        text.getChars(5, 15, charArray10, 0);
        System.out.println("Extracted characters: " + new
            String(charArray10));

        // toLowerCase()
        String lowerCaseText = text.toLowerCase();
        System.out.println("Lowercase text: " + lowerCaseText);

        // toUpperCase()
        String upperCaseText = text.toUpperCase();
        System.out.println("Uppercase text: " + upperCaseText);

        // trim()
        String trimmedText = text.trim();
        System.out.println("Trimmed text: " + trimmedText);
```

3

```
113
114             // valueOf()
115             int number = 42;
116             String stringValue = String.valueOf(number);
117             System.out.println("String value of number: " + stringValue);
118
119         }
120
121     }
```

Output

```
isEmpty:
false
true
Joined text: We-realizes-that-while-our-workers-were-thriving-,-the-surrounding-villages-were-still-suffering.-It-became-our-goal-to-uplift-their-qual
ity-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
Last index of 'villages': 67
Text length: 333
Replaced text: We realizes that while our workers were prospering , 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 w
ere risking their lives for lack of an alternative
Regex replaced text: We realizes that while our workers were thriving , the surrounding villages were still suffering. It became our goal to uplift th
eir quality of life as well. I remember seeing a family of X on a motorbike in the heavy Bombay rain — I knew I wanted to do more for these families w
ho were risking their lives for lack of an alternative
Sentences:
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 f
or lack of an alternative
Starts with 'We': true
Substring: We realizes that whi
Extracted characters: alizes tha
Lowercase text: we realizes that while our workers were thriving , the surrounding villages were still suffering. it became our goal to uplift their q
uality 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 we
re risking their lives for lack of an alternative
Uppercase text: WE REALIZES THAT WHILE OUR WORKERS WERE THRIVING , THE SURROUNDING VILLAGES WERE STILL SUFFERING. IT BECAME OUR GOAL TO UPLIFT THEIR Q
UALITY 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 WE
RE RISKING THEIR LIVES FOR LACK OF AN ALTERNATIVE
Trimmed text: We realizes that while our workers were thriving , the surrounding villages were still suffering. It became our goal to uplift their qua
lity 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
String value of number: 42
```