RESEARCH

1. Select five methods from the String JavaDocs and describe the following for each:
(a) What is the method signature?
(b) What does the method do?
(c) Why would this method be useful (how could you use it)?
1. length ();
 → This method will tell many element there are in a given String. → We can use this method as following :
String str = "Steve";
→ System.ou.println(str.length());
2. charAt(int index);
→ This method takes an integer as parameter(index) and return the character value at specified index.
For example, if we need to know what is the 1st letter in String str:
→ System.out.println(str.charAt(0));
3. concat(String str);
→ We can use this method to attach two Strings together.
Example:
→ Str.contact("St.Eleur):

4. indexOf(int ch)

→ This method takes a string or a single character as parameter and return the first occurrence of the specified character or the 1st element in the string.

Example:

→ System.out.println(str.indexOf('t));

5. equals(String str)

-This method can compare two given Strings and return true if all the characters are matched and false if any character is not matched.

Example:

```
String str = "Steve";

String str1 = "steve";

if (str1.equals(str2){
    System.out.println("The 2 strings are the same);
    }
    else {
        System.out.println("The string are not the same);
    }
}
```

2. Select five methods from the Array JavaDocs and describe the following for each:
(a) What is the method signature?
(b) What does the method do?
(c) Why would this method be useful (how could you use it)?
3. What is your favorite thing you learned this week?
Note: To use the methods from array we must first import the Arrays class
1. toString
-This method takes an array as parameter and return all element of the array enclosed in square bracket.
Example: int [] arr = new int []{4,24,-5};
→ System.out.println(Arrays.toString(arr));
2. sort(array)
-This method will take an array as parameter and sorted it ascending order.
Example :
→ Arrays.sort(arr);

- 3. equals(array.array)
- This method takes two arrays as parameter and return true if both arrays have the same number of element and all corresponding pairs of element are equals.

- 4. Fill(int []array, value)
- This method takes an array as parameter and a specific value. When calling this method the element of the array will be replaced by the specific value passed.

Example:

```
→ Arrays.fill(arr2,5);
```

5. clone()

-This method will create an exact copy of a given array.

Example:

→ int []newArr = arr2.clone();

Source: <u>Arrays class in Java - GeeksforGeeks</u>; <u>Arrays (Java Platform SE 7) (oracle.com)</u>; <u>String (Java SE 12 & JDK 12) (oracle.com)</u>

- 3. What is your favorite thing you learned this week?
- Everything learned this week is very interesting and useful.