

CS 120 Project 5

Due Wednesday March 29

Project 5

- Implement the methods `find`, `findLeft` and `findRight` in the `StringFind` class. Do not change the `main` method. Your implementation of `findLeft` and `findRight` must use `find`. For this project the comparison of characters is case sensitive. The only string functions you can use are `length` and `charAt`.

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```
import java.io.*;
import java .util.*;

public class StringFind {

    public static boolean find(String s1, String s2, int start) {
        //return true if s2 is found in s1 beginning at position start
        //otherwise return false
    }

    public static int findLeft(String s1, String s2) {
        //if s2 is found in s1 return the leftmost position of s2 in s1
        //otherwise return -1

    }

    public static int findRight(String s1, String s2) {
        //if s2 is found in s1 return the rightmost position of s2 in s1
        //otherwise return -1

    }

}
```

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```
public static void main(String args[]) {
//DO NOT CHANGE MAIN
    int indexLeft;
    int indexRight;
    String s1;
    String s2;
    Scanner s = new Scanner(System.in);
    System.out.println("Enter a line to be searched");
    s1 = s.nextLine();
    System.out.println("Enter a search string (on a line) or an empty line to quit");
    s2 = s.nextLine();
}
```


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Example Execution

User Input in Bold

Enter a line to be searched

abc def ghi abcdefghi abc xyz defg

Enter a search string (on a line) or an empty line to quit

abc

The left most occurrence of abc begins at 0

The right most occurrence of abc begins at 22

Enter a search string (on a line) or an empty line to quit

hi a

The left most occurrence of hi a begins at 9

The right most occurrence of hi a begins at 19

Enter a search string (on a line) or an empty line to quit

wxyz

wxyz was not found

Enter a search string (on a line) or an empty line to quit

def

The left most occurrence of def begins at 4

The right most occurrence of def begins at 30

Enter a search string (on a line) or an empty line to quit

dEF

dEF was not found

Enter a search string (on a line) or an empty line to quit

Project 5 Requirements

- You must write the code yourself
- The name of the class must be **StringFind** and the file containing your program must be called **StringFind.java**. Remember java is case sensitive.
- Include a comment describing the purpose of the program. The comment should include your name.
- You can ask questions of your classmates but you **MUST NOT** share code. If you have a question it is usually better to ask me.
- Use meaningful **variable names and proper indentation**.

Project 5 Submission

- Upload one zip file to Canvas. The zip file must contain only one file called StringFind.java.
- The project is worth 30 points. The project must be submitted on time.
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