**Assignment 1 “isSubString”**

1. Pseudocode of “isSubString” method.

BOOLEAN ISSUBSTRING( STRING1 , STRING2)

lim ← Length [STRING1]

lim2 ← Length [STRING2]

FOR i ← 0 To (lim2 - lim1)

String3 SubstringOf String2 FROM i TO i + lim

IF String 3 == String1

return true

return false

1. IsSubString Implementation in Java, including manual user string input.

package com.company;

import javax.swing.\*;

public class SubString {

public static void main(String[] args) {

String input1 = JOptionPane.showInputDialog("Enter First String: ");

String input2 = JOptionPane.showInputDialog("Enter 2nd String: ");

if (isSubString(input1,input2)== true)

*// System.out.println("Success");*

JOptionPane.showMessageDialog(null,"Success '" + input1 + "' is a substring of '" + input2 + "'");

else

JOptionPane.showMessageDialog(null,"Fail " + input1 + " is not a substring of " + input2);

}

public static boolean isSubString(String str1, String str2){

*//Declaring lower and upper limits of the substring.*

int lim = str1.length();

int lim2 = str2.length();

*//Iterating through the main string(str2) and testing*

*//each 'chunk' of the main string against the substring(str1).*

for (int i = 0; i <=(lim2-lim)+1 ;i++)

{

*//Creating a temporary string to hold the 'chunk' of the main string(str2).*

String str3;

*//Making the temporary string equal to the correct 'chunk' of the main string(str2),*

*// i is where the 'chunk' starts and i + lim is where it ends.*

str3 = str2.substring(i,i+lim);

*//Comparing the 'Chunk' against the substring(str1),*

*//and exiting the loop(and function) if the result is true.*

if (str3.equals(str1)) {

return true;

}

}

*// If the Main string(str2) does not contain the substring(str1) then the function*

*// exits with a value of 'false'.*

return false;

}

}

SCREENSHOTS





