1. Write a Java Program to determine whether one string is a rotation of another.

Description:  
In this program, we need to check whether a string is a rotation of another string or not.

String 1: abcde  
String 2: deabc  
String 1 + String 1: abcdeabcde

Consider the above example, suppose we need to check whether string 2 is a rotation of string 1. To find this, we concatenate string 1 with string 1. Then, try to find the string 2 in concatenated string. If string 2 is present in concatenated string then, string 2 is rotation of string 1. String 2 deabc is found on the index 3 in concatenated string. So, deabc is rotation of abcde.

ALGORITHM  
STEP 1: START  
STEP 2: DEFINE String str1 = "abcde", str2 = "deabc"  
STEP 3: IF length of str1 not equals to str2 then PRINT "No"  
else go to STEP 4  
STEP 4: CONCATENATE str1 with str1.  
STEP 5: IF str2 present in str1 then PRINT "Yes" else PRINT "No".  
STEP 6: END

**Code:**

public class Main

{

public static void main(String[] args) {

String str1 = "abcde", str2 = "decba";

if(str1.length() != str2.length()){

System.out.println("Second string is not a rotation of first string");

}

else {

str1 = str1.concat(str1);

if(str1.indexOf(str2) != -1)

System.out.println("Second string is a rotation of first string");

else

System.out.println("Second string is not a rotation of first string");

}

}

}

**Output:**



