1. /\* Write a Java program to print the following pattern for any give positive integer?

input=8

1 1

2 2

3 3

4

3 3

2 2

1 1

input=11

1 1

2 2

3 3

4 4

5

5

4 4

3 3

2 2

1. 1

\*/2. /\* Write a Java Program to rotate the elements of array towards its right by the specified number of times.

input= 5 //array Size

1 2 3 4 5 // array elements

1 // specified number of times

output=

5 1 2 3 4

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int arr[]=new int[10];

int length,rotate;

Scanner sc=new Scanner(System.in);

length=sc.nextInt();

for(int i=0;i<length;i++){

arr[i]=sc.nextInt();

}

rotate=sc.nextInt();

for(int i = 0; i < rotate; i++){

int j, last;

last = arr[length-1];

for(j = length-1; j >0; j--){

arr[j] = arr[j-1];

}

arr[0] = last;

}

for(int i=0;i<length;i++){

System.out.println(arr[i]+" ");

}

}

\*/3. /\* Write a Java program to check the given two strings are anagrams or not? if they are angram pring "Yes" esle print -1

An anagram is a word or phase that's formed by rearrenging the letters of another word or phrase.

case=1

input= dog

god

output=Yes

case =2

input= kmit

itkk

output=-1\*/

import java.util.\*;

public class Test

{

public static void main(String args[])

{

}

}

import java.util.Scanner;

public class Main

{

public static void main(String[] input)

{

String str1, str2;

int len, len1, len2, i, j, found=0, not\_found=0;

Scanner scan = new Scanner(System.in);

System.out.print("Enter First String : ");

str1 = scan.nextLine();

System.out.print("Enter Second String : ");

str2 = scan.nextLine();

len1 = str1.length();

len2 = str2.length();

if(len1 == len2)

{

len = len1;

for(i=0; i<len; i++)

{

found = 0;

for(j=0; j<len; j++)

{

if(str1.charAt(i) == str2.charAt(j))

{

found = 1;

break;

}

}

if(found == 0)

{

not\_found = 1;

break;

}

}

if(not\_found == 1)

{

System.out.print("Strings are not Anagram to Each Other..!!");

}

else

{

System.out.print("Strings are Anagram");

}

}

else

{

System.out.print("Both Strings Must have the same number of Character to be an Anagram");

}

}

}

import java.util.\*;

import java.io.\*;

import java.util.Arrays;

import java.util.Collections;

class Main

{

static boolean areAnagram(char[] str1, char[] str2)

{

// Get lenghts of both strings

int n1 = str1.length;

int n2 = str2.length;

// If length of both strings is not same,

// then they cannot be anagram

if (n1 != n2)

return false;

// Sort both strings

Arrays.sort(str1);

Arrays.sort(str2);

// Compare sorted strings

for (int i = 0; i < n1; i++)

if (str1[i] != str2[i])

return false;

return true;

}

/\* Driver program to test to print printDups\*/

public static void main(String args[])

{

String s1,s2;

Scanner sc=new Scanner(System.in);

s1=sc.next();

char[] arr1 = s1.toCharArray();

// String str1 = new String(arr1);

s2=sc.next();

char[] arr2 = s1.toCharArray();

//String str2 = new String(arr2);

if (areAnagram(arr1, arr2))

System.out.println("The two strings are"

+ " anagram of each other");

else

System.out.println("The two strings are not"

+ " anagram of each other");

}

}

4. /\* Write a Java program to find all subset of strings

subsets of a string "FUN" will be F, U, N, FU, UN, FUN.

Note:- Subsets must be in Sorted order

input=FUN

output=

F

FU

FUN

N

U

UN

import java.util.\*;

class Main{

public static void SubString(String str, int n)

{

for (int i = 0; i < n; i++){

for (int j = i+1; j <= n; j++)

System.out.println(str.substring(i, j));

}

}

public static void main(String[] args){

String s;

Scanner sc=new Scanner(System.in);

s=sc.nextLine();

int n=s.length();

char[] arr = s.toCharArray();

Arrays.sort(arr);

String str = new String(arr);

SubString(str,n);

}

}

\*/5. /\* Write a Java program to print the following pattern for any give positive integer 'n'?

input=4

12344321

123##321

12####21

1######1

import java.util.\*;

class Main{

public static void main(String[] args){

int lines;

Scanner sc=new Scanner(System.in);

lines=sc.nextInt();

int i,j;

int space=0;

for(i=0;i<lines;i++){// this loop is used to print lines

for(j=1;j<=space;j++){// this loop is used to print space in a line

System.out.print(" ");

}

for(j=1;j<=lines;j++){// this loop is used to print numbers in a line

if(j<=(lines-i))

System.out.print(j);

else

System.out.print("\*");

}

j--;

while(j>0){// this loop is used to print numbers in a line

if(j>lines-i)

System.out.print("\*");

else

System.out.print(j);

j--;

}

if((lines-i)>9)// this loop is used to increment space

space=space+1;

System.out.println("");

}

}

}

\*/6. /\* Write a Java program to determine whether one string is a rotation of another? print Yes if it is

rotation else print -1

input=abcde

deabc

output=Yes

input=abcde

acdeb

output=-1

\*/

import java.util.\*;

class Main{

public static boolean checkRotation(String st1, String st2) {

if (st1.length() != st2.length()) {

return false;

}

String st3 = st1 + st1;

if (st3.contains(st2))

return true;

else

return false;

}

public static void main(String[] args) {

String str1;

String str2;

Scanner sc=new Scanner(System.in);

str1=sc.nextLine();

str2=sc.nextLine();

System.out.println("Checking if a string is rotation of another");

if (checkRotation(str1, str2)) {

System.out.println("Yes " + str2 + " is rotation of " + str1);

} else {

System.out.println("No " + str2 + " is not rotation of " + str1);

}

}

}