Given a string, return a string where for every char in the original, there are two chars.  
doubleChar("The") → "TThhee"  
doubleChar("AAbb") → "AAAAbbbb"  
doubleChar("Hi-There") → "HHii--TThheerree"

public String doubleChar(String str) {

String result = "";

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

result = result + str.charAt(i) + str.charAt(i);

// Alternately:

// result = result + str.substring(i, i+1) + str.substring(i, i+1);

}

return result;

}

Return the number of times that the string "hi" appears anywhere in the given string.

countHi("abc hi ho") → 1  
countHi("ABChi hi") → 2  
countHi("hihi") → 2

public int countHi(String str) {

int count=0;

for(int i=0;i<str.length()-1;i++){

if(str.charAt(i)=='h'){

if(str.charAt(i+1)=='i')

count++;

}

}

return count;

}

public int countHi(String str) {

int count=0;

for(int i=0;i<str.length()-1;i++){

if(str.substring(i,i+2).equals("hi")){

count++;

}

}

return count;

}

Return true if the string "cat" and "dog" appear the same number of times in the given string.

catDog("catdog") → true

catDog("catcat") → false

catDog("1cat1cadodog") → true

public boolean catDog(String str) {

int c=0;

int d=0;

for (int i = 0; i < str.length() - 2; i++) {

if (str.substring(i, i + 3).equals("cat")) {

c++;

}

if (str.substring(i, i + 3).equals("dog")) {

d++;

}

}

if(c==d) {

return true;

}

else

return false;

}