Problem2

public class ProbMapStr2 {  
 static String palindromic(String s1,String s2) {  
 int n = s1.length();  
 int m = s2.length();  
 int[][] dp = new int[n + 1][m + 1];  
 for (int i = 1; i < n + 1; i++) {  
 for (int j = 1; j < m + 1; j++) {  
 if (s1.charAt(i - 1) == s2.charAt(j - 1)) {  
 dp[i][j] = dp[i - 1][j - 1] + 1;  
 } else {  
 dp[i][j] = Math.*max*(dp[i - 1][j], dp[i][j - 1]);  
 }  
 }  
 }  
  
 int len = dp[n][m];  
 int i = n;  
 int j = m;  
 int idx = len - 1;  
 String str = "";  
 for (int k = 1; k <= len; k++) {  
 str += "$";  
 }  
 StringBuilder sb = new StringBuilder(s1);  
 StringBuilder str2 = new StringBuilder(str);  
 while (i > 0 && j > 0) {  
 if (sb.charAt(i - 1) == s2.charAt(j - 1)) {  
 str2.setCharAt(idx, sb.charAt(i - 1));  
 idx--;  
 i--;  
 j--;  
 } else if (sb.charAt(i - 1) > s2.charAt(j - 1)) {  
 i--;  
 } else {  
 j--;  
 }  
 }  
 return str2.toString();  
 }  
  
 public static void main(String[] args) {  
 String s="babad";  
 String rev=new StringBuilder(s).reverse().toString();  
 System.*out*.println(*palindromic*(s,rev));  
  
 }  
}

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Problem3

import java.util.Stack;  
  
public class ProbMapStr3 {  
 public static void main(String[] args) {  
 String s="([{}])";  
 Stack<Character> stack=new Stack<>();  
 for(int i=0;i<s.length();i++){  
 char ch=s.charAt(i);  
 if(ch=='('||ch=='['||ch=='{') stack.push(ch);  
 else if ((stack.peek()=='('&&ch==')')||(stack.peek()=='['&&ch==']')||(stack.peek()=='{'&&ch=='}')) stack.pop();  
 else System.*out*.println(false);  
 }  
 System.*out*.println(stack.isEmpty());  
 }  
}

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Problem1

import java.util.ArrayList;  
import java.util.Arrays;  
import java.util.HashMap;  
import java.util.List;  
  
public class problem8 {  
 static List<List<String>> anagram(String[] str){  
 HashMap<String,List<String>> map=new HashMap<>();  
 for(String s:str){  
 char[] charArr=s.toCharArray();  
 Arrays.*sort*(charArr);  
 String sorted=new String(charArr);  
  
 if(!map.containsKey(sorted)){  
 map.put(sorted,new ArrayList<>());  
 }  
  
 map.get(sorted).add(s);  
 }  
 return new ArrayList<>(map.values());  
 }  
 public static void main(String[] args) {  
 String[] str={"eat","tea","tan","ate","nat","bat"};  
 List<List<String>> result=*anagram*(str);  
  
 for(List<String> s:result) System.*out*.println(s);  
 }  
}

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Problem7

import java.util.Arrays;  
  
public class ProbMapStr7 {  
 static String prefix(String[] str){  
 Arrays.*sort*(str);  
 String s1=str[0];  
 String s2=str[str.length-1];  
 int idx=0;  
 while(idx<s1.length()&&idx<s2.length()){  
 if(s1.charAt(idx)==s2.charAt(idx)) idx++;  
 else break;  
 }  
 return s1.substring(0,idx);  
 }  
 public static void main(String[] args) {  
 String[] str={"flower","flow","flight"};  
 System.*out*.println(*prefix*(str));  
  
 }  
}

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Problem9

public class ProbMapStr9 {  
 public static void main(String[] args) {  
 String str="Hello World";  
 String[] s=str.split(" ");  
 String last=s[s.length-1];  
 System.*out*.println(last.length());  
 }  
}

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