Scramble String

1)Matrix chain multiplication problem

class Solution {

public boolean isScramble(String s1, String s2)

{

if(s1.length()!=s2.length())

return false;

if(s1.equals(s2))

return true;

int n=s1.length();

if(n==0)

return true;

HashMap<String,Boolean> map=new HashMap();

String key=s1+ " " +s2;

if(map.containsKey(key))

return map.get(key);

char[] temp1=s1.toCharArray();

char[] temp2=s2.toCharArray();

Arrays.sort(temp1);

Arrays.sort(temp2);

String copys1=new String(temp1);

String copys2=new String(temp2);

if(!copys1.equals(copys2))

return false;

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

{

if(isScramble(s1.substring(0,i),s2.substring(n-i)) && isScramble(s1.substring(i),s2.substring(0,n-i)))

{

map.put(key,true);

return true;

}

if(isScramble(s1.substring(0,i),s2.substring(0,i)) && isScramble(s1.substring(i),s2.substring(i)))

{

map.put(key,true);

return true;

}

}

map.put(key,false);

return false;

}

}