**Next greater number set digits**

[searching](http://www.practice.geeksforgeeks.org/tag-page.php?tag=searching&isCmp=0)[Adobe](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Adobe&isCmp=1)[Amazon](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Amazon&isCmp=1)[Hike](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Hike&isCmp=1)[Microsoft](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Microsoft&isCmp=1)[Morgan Stanley](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Morgan%20Stanley&isCmp=1)[Oxigen Wallet](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Oxigen%20Wallet&isCmp=1)[Samsung](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Samsung&isCmp=1)[Snapdeal](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Snapdeal&isCmp=1)[Vizury Interactive S](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Vizury%20Interactive%20S&isCmp=1)[Zillious](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Zillious&isCmp=1)

Given a number n, find the smallest number that has same set of digits as n and is greater than n. If x is the greatest possible number with its set of digits, then print “not possible”.

**Input:**

The first line of input contains an integer T denoting the number of test cases.  
The first line of each test case is n,n is the number.  
  
**Output:**

Print the greater number than n with same set of digits and if not possible then print "not possible" without double quote.  
  
**Constraints:**

1 ≤ T ≤ 100  
1 ≤ n ≤ 100000  
  
**Example:**

Input  
2  
143  
431

Output  
314  
not possible

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=384>

from itertools import permutations

t =int(raw\_input())

for i in range(0,t):

n=int(raw\_input())

perms = [*''*.join(p) for p in permutations(str(n))]

perms.sort()

#print perms

ans = n

for elem in perms:

if int(elem) > n:

ans = int(elem)

break

if ans == n:

print *"not possible"*

else:

print ans