SQUARE TO SQUARE

There are Squares whose digits can be rearranged to make another squares.Lets call them S2S numbers.

for ex.

144->441

Input

Single line containing two integers X Y(Xth,Yth term in the list of S2S numbers).

Output

Print all the numbers from Xth to Yth Term of S2S numbers list(both inclusive).

Example

Input:

13

Output:

144

169 196

(Xth,Yth term<=10^12) (Source Code Limit= 500B)

Note: 1->100->1 or other similar numbers are NOT S2S numbers(ex 9->900->9)

Try Tutorial at -> http://www.spoj.com/problems/SQ2SQ2/