

TELEPHONE WORDS

CHALLENGE DESCRIPTION:

Given a 7 digit telephone number, print out all the possible sequences of letters that can represent the given telephone number. Note that in a standard 12 key pad, 0 and 1 do not have any letters associated with them. They are to be treated as such, i.e. a 0/1 in the telephone number will be retained in the final word as well. You may use the following mapping between numbers and characters:

0	=>	0
1	=>	1
2	=>	abc
3	=>	def
4	=>	ghi
5	=>	jkl
6	=>	mno
7	=>	pqrs
8	=>	tuv
9	=>	wxyz

INPUT SAMPLE:

Your program should accept as its first argument a path to a filename.The input file contains 7 digit telephone numbers, one per line.

4155230

OUTPUT SAMPLE:

Print out the words that can produce the telephone number, alphabetically sorted and comma delimited. E.g.

g1jjad0,g1jjae0,g1jjaf0,g1jjbd0,g1jjbe0,g1jjbf0,g1jjcd0,g1jjce0,g1jjcf0,g1jkad0,g1jkae0,g1jkaf0,g1jkbd0,g1jkbe0,g1jkb f0,g1jkcd0,g1jkce0,g1jkcf0,g1jlad0,g1jlae0,g1jlaf0,g1jlbd0,g1jlbe0,g1jlbf0,g1jlcd0,g1jlce0,g1jlc f0,g1kjad0,g1kjae0,g1k af0,g1kjbd0,g1kjbe0,g1kjbf0,g1kjcd0,g1kjce0,g1kjcf0,g1kkad0,g1kkae0,g1kkaf0,g1kkbd0,g1kkbe0,g1kkbf0,g1kkcd0,g1kkce0,g1 kkcf0,g1klad0,g1klae0,g1klaf0,g1klbd0,g1klbe0,g1klbf0,g1klcd0,g1klce0,g1klcf0,g1ljad0,g1ljae0,g1ljaf0,g1ljbd0,g1ljbe0, g1ljbf0,g1ljcd0,g1ljce0,g1ljcf0,g1lkad0,g1lkae0,g1lkaf0,g1lkbd0,g1lkbe0,g1lkbf0,g1lkcd0,g1lkce0,g1lkcf0,g1llad0,g1llae 0,g1llaf0,g1llbd0,g1llbe0,g1llbf0,g1llcd0,g1llce0,g1llcf0,h1jjad0,h1jjae0,h1jjaf0,h1jjbd0,h1jjbe0,h1jjbf0,h1jjcd0,h1jj ce0,h1jjcf0,h1jkad0,h1jkae0,h1jkaf0,h1jkbd0,h1jkbe0,h1jkb f0,h1jkcd0,h1jkce0,h1jkcf0,h1jlad0,h1jlae0,h1jlaf0,h1jlbd0,h1 jlbe0,h1jlbf0,h1jlcd0,h1jlce0,h1jlc f0,h1kjad0,h1kjae0,h1kjaf0,h1kjbd0,h1kjbe0,h1kjbf0,h1kjcd0,h1kjce0,h1kjcf0,h1kkad0, h1kkae0,h1kkaf0,h1kkbd0,h1kkbe0,h1kkbf0,h1kkcd0,h1kkce0,h1kkcf0,h1klad0,h1klae0,h1klaf0,h1klbd0,h1klbe0,h1klbf0,h1klcd 0,h1klce0,h1klcf0,h1ljad0,h1ljae0,h1ljaf0,h1ljbd0,h1ljbe0,h1ljbf0,h1ljcd0,h1ljce0,h1ljcf0,h1lkad0,h1lkae0,h1lkaf0,h1lk bd0,h1lkbe0,h1lkbf0,h1lkcd0,h1lkce0,h1lkcf0,h1llad0,h1llae0,h1llaf0,h1llbd0,h1llbe0,h1llbf0,h1llcd0,h1llce0,h1llcf0,i1 jjad0,i1jjae0,i1jjaf0,i1jjbd0,i1jjbe0,i1jjbf0,i1jjcd0,i1jjce0,i1jjcf0,i1jkad0,i1jkae0,i1jkaf0,i1jkbd0,i1jkbe0,i1jkb f0,i1jkcd0,i1jkce0,i1jkcf0,i1jlad0,i1jlae0,i1jlaf0,i1jlbd0,i1jlbe0,i1jlbf0,i1jlcd0,i1jlce0,i1jlc f0,i1kjad0,i1kjae0,i1kjaf 0,i1kjbd0,i1kjbe0,i1kjbf0,i1kjcd0,i1kjce0,i1kjcf0,i1kkad0,i1kkae0,i1kkaf0,i1kkbd0,i1kkbe0,i1kkbf0,i1kkcd0,i1kkce0,i1kk cf0,i1klad0,i1klae0,i1klaf0,i1klbd0,i1klbe0,i1klbf0,i1klcd0,i1klce0,i1klcf0,i1ljad0,i1ljae0,i1ljaf0,i1ljbd0,i1ljbe0,i1 ljbf0,i1ljcd0,i1ljce0,i1ljcf0,i1lkad0,i1lkae0,i1lkaf0,i1lkbd0,i1lkbe0,i1lkbf0,i1lkcd0,i1lkce0,i1lkcf0,i1llad0,i1llae0, i1llaf0,i1llbd0,i1llbe0,i1llbf0,i1llcd0,i1llce0,i1llcf0
--