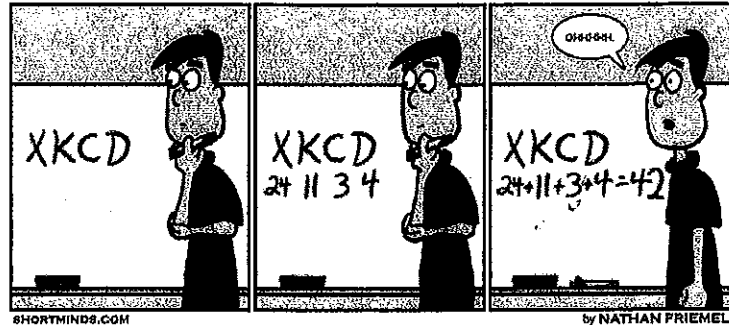# XKCD

Filename: xkcd

Matt is a fan of the web comic XKCD. Being such a fan he would like to come up with an online name similar to xkcd (he wants to keep his lower-case). Your job will be to help Matt come up with a name similar to xkcd.

Looking at this name it can be seen that taking the sum of the ordinal's of each letter in the word totals to 42 or, as we know, the answer to life, the universe and everything. Ordinals are defined as the 1-based index for each letter in the alphabet (a=1, b=2, c=3, ..., z=26).

Matt also remembered watching an interview with Randall Munroe (the creator of xkcd) and learning one of the requirements of the online name he chose for himself: "xkcd" (xkcd the comic was later given this same name). Randall required that his name be non-pronounceable. Therefore, Matt would also like his name to be non-pronounceable as well. To ensure this, Matt would like to choose a name that does not have any vowels in it. To be extra careful he would like to include the letter "y" as a vowel.

Lastly, Matt noticed that the values of each of the ordinals of the letters in "xkcd" are strictly decreasing if you swap the last two letters (i.e., xkcd → xkdc where x=24 > k=11 > d=4 > c=3). To make his name even more similar to xkcd, Matt would like his name to have a strictly decreasing order when the last letters are swapped.

Given these rules, Matt would like to see what names he could possibly choose from a list of names that meet these requirements. Even though he is a huge fan of XKCD, he still wants to be unique, however. He has decided to have one major difference in his chosen name. He would like to be able to look at names of different lengths that meet his requirements. Your job is to write a program that takes in a length desired and prints out all the names of that length in alphabetical order that meet his XKCD-like requirements.

The Problem:

Given a name with a particular length, print out all names of that same length whose ordinals for each character add up to 42, are strictly decreasing when the last letters are swapped and are non-pronounceable (meaning that it contains no vowels including "y").

The Input:

The input will be lines containing single positive integers, n ($2 \leq n \leq 42$), representing the length of the names that you must print out that are "xkcd-like." The number 42 indicates end of input.

The Output:

For each length requested in the input, output "XKCD-like name(s) of length: *n*" where *n* is the length given in the input. On the following lines, output all names (in alphabetical order) that are XKCD-like that are also in the universe of *n* letter strings. If there are no such strings for the input length, output the phrase "Mostly Harmless" instead. Note that the end of input marker of 42 should not be processed normally; instead, you should output the phrase "The answer to life, the universe and everything!" and end.

Sample Input:

```
2
6
28
42
```

Sample Output:

```
XKCD-like name(s) of length: 2
pz
rx
sw
tv
XKCD-like name(s) of length: 6
kjhfcd
kjhgbd
ljgfcd
ljhfbd
ljhgbc
lkgfbd
lkhfbc
lkjdbc
mjgfbd
mjhfbc
mkgfbc
mlhdbc
nhgfcd
njgfbc
nkhdbc
nlgdbc
nmfdbc
phgfbc
pjgdbc
pkfdbc
qjfdbc
rhgdbc
shfdbc
tgfdbc
XKCD-like name(s) of length: 28
Mostly Harmless
The answer to life, the universe and everything!
```