Printing cool words   P42568_en
Examen parcial d'Algorísmia, FME (2010-10-26)

In this problem, we say that a word is cool if it does not have two consecutive consonants. Write a program to print all the cool words with n lowercase letters, v of which are vowels, that can be made up from the x first letters of the alphabet.

For instance, these are some of the many cool words for $n = 5$, $v = 3$ and $x = 5$:

$$\text{aabab} \quad \text{ababa} \quad \text{babaa} \quad \text{cecea} \quad \text{deeac}$$

Input

Input consists of three natural numbers $n > 0$, $0 \le v \le n$, and $2 \le x \le 26$.

Output

Print, in alphabetic order, all the cool words with n lowercase letters, v of which are vowels, that can be made up from the x first lowercase letters. Assume that 'y' is a consonant.

Sample input 1
```
3 2 3
```

Sample output 1
```
aab
aac
aba
aca
baa
caa
```

Sample input 2
```
2 1 5
```

Sample output 2
```
ab
ac
ad
ba
be
ca
ce
da
de
eb
ec
ed
```

Sample input 3
```
42 20 26
```

Sample output 3

Sample input 4
```
31 15 2
```

Sample output 4
```
babababababababababababababababab
```

Sample input 5

```
2 2 26
```

Sample output 5

```
aa
ae
ai
ao
au
ea
ee
ei
eo
eu
ia
ie
ii
io
iu
oa
oe
oi
oo
ou
ua
ue
ui
uo
uu
```

Problem information

Author : Salvador Roura
Translator : Salvador Roura
Generation : 2024-05-02 17:22:52