Printing cool words   P42568_en

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

Problem information

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