

ACSL

2013 - 2014

American Computer Science League

Contest #4

ACSL NUMBLE Junior Division

Problem: From Wikipedia, the free encyclopedia:

Numble is a 1965 board game published by Selchow and Righter which is very similar to Scrabble. Instead of forming words, players form sequences adhering to certain arithmetic and numerical constraints.

Each tile in ACSL Numble has a single digit, 1 through 9. A "word" in ACSL Numble is a string of digits in numerical order (high to low), with duplicate digits allowed, and where the sum of the digits is a multiple of 5. For example, 7611 is a valid word, as is 76331.

INPUT: There will be 5 lines of input. Each line will contain a character string of 7 digits (1 - 9) and a length to use.

OUTPUT: For each input line, print in numerical order the character string of the stated length that produces the largest sum of the digits that is a multiple of 5. If there are ties, print all the strings that produce the tie. If no string matches the criteria, print NONE.

SAMPLE INPUT

1. 9678415, 7
2. 9678415, 6
3. 9678415, 5
4. 9678415, 4
5. 2678515, 3

SAMPLE OUTPUT

1. 9876541
2. 987641
3. 98765
4. 9876
5. 875

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TEST DATA

TEST INPUT

1. 4361842, 7
2. 9143675, 6
3. 1473518, 5
4. 8264123, 4
5. 7439264, 3

TEST OUTPUT

1. NONE
2. 976431
3. 87541
4. 8642
5. 974