## Problem 4 – Hayvan Numbers

Hayvan often plays with numbers. His recent game was to play with 9-digit numbers and calculate their sums of digits, as well as to split them into triples with special properties. Help Hayvan to find a very special set of numbers called “***Hayvan numbers***”.

Hayvan numbers are 9-digit numbers in format **abcdefghi**, such that their sub-numbers **abc**, **def** and **ghi** have a difference **diff** (ghi-def = def-abc = diff), their sum of digits is **sum** and **abc ≤ def** **≤** **ghi**, where each digit **a**, **b**, **c**, **d**, **e**, **f**, **g**, **h** and **i** is in range [5…9].

Your task is to write a program to print all Hayvan numbers for given **sum** and **diff** in increasing order.

### Input

* The input data should be read from the console.
* The number **sum** stays at the first line.
* The number **diff** stays at the second line.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output should be printed on the console. Print Hayvan numbers matching given difference **diff** and given sum of digits **sum**, in increasing order, each at a separate line. In case no Hayvan numbers exits, print “**No**”.

### Constraints

* The number **sum** will be a positive **integer** number in the range [0…100].
* The number **diff** will be a positive **integer** number in the range [0…1000].
* Allowed working time for your program: 0.25 seconds.
* Allowed memory: 16 MB.

### Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 63  201 | 567768969  576777978  585786987 | 5+6+7+7+6+8+9+6+9 = 63; 768-567 = 201; 969-768 = 201  5+7+6+7+7+7+9+7+8 = 63; 777-576 = 201; 978-777 = 201  5+8+5+7+8+6+9+8+7 = 63; 786-585 = 201; 987-786 = 201 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |
| 75  1 | 897898899  987988989  996997998 | 93  10 | No |