Equal Sum Numbers

problem 14

5 points

Your friend is a math geek. He likes to play with numbers and has given you a puzzle to solve. You are required to find all numbers within a given range which have equal sum of digits between the even and odd indexes of the number.

Write a program to solve the puzzle.

Discussion

To determine if a number's digits are equal between the even and odd indexes, start counting from the right of the number at the One's column as index zero, and work left. Count index zero as even. So, if examining 101, look at it like this:

Number	**1**	**0**	**1**
Index	2	1	0

In this case the sum of the even indexes would be 1 (index 0) + 1 (index 2) = 2 And the sum of the odd indexes would be 0 (index 1) + nothing = 0 So, 101 would NOT have equal sums.

If examining 6721, look at it like this:

Number	**6**	**7**	**2**	**1**
Index	3	2	1	0

In this case the sum of the even indexes would be 1 (index 0) + 7 (index 2) = 8 And the sum of the odd indexes would be 2 (index 1) + 6 (index 3) = 8 So, 6829 WOULD have equal sums.

Input

Your program's input is:

```
N1
N2
```

Note: N1 and N2 may be single digit numbers but you must be aware that the problem only focuses on numbers with digits >=2.

Example 1

```
100
150
```

Example 2

```
365
374
```

Example 3

```
800
1500
```

Output

The output should check for N1 but not N2 for the equal sum requirement.

Example Output 1

```
110 121 132 143
```

Example Output 2

```
No Numbers found with Equal Sum in the given range!!
```

Example Output 3

```
880 891 990 1001 1012 1023 1034 1045 1056 1067 1078 1089 1100 1111 1122 1133 1144 1155 1166 1177 1188 1199 1210
1221 1232 1243 1254 1265 1276 1287 1298 1320 1331 1342 1353 1364 1375 1386 1397 1430 1441 1452 1463 1474 1485
1496
```