

- Problem-1

- A Lucky number is any positive number that its decimal representation contains only 4 and 7.

Given L and R, print all Lucky numbers between L and R inclusive.

## Input

Enter L :

4

Enter R:

100

## Output

4

7

44

47

74

77

- **Problem-2**

- Given array of N numbers. Count how many of these values are even and negative.

## Input

Enter the size:

5

Enter the values:

-5 0 1 -2 4

## Output

Even : 3

negative : 2

### • Problem-3

- Input a two-dimensional array 5\*5 of Zeroes and a single 1, find the minimum number of moves to get the element 1 in the position [2][2]. (The moves are up, down, left & right. No diagonal moves)

Input

```
0 0 0 0 0
0 0 0 0 1
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
```

Output

3

Note: element 1 exists in the position [1][4], two moves left and one down  
So, the minimum number of moves is 3

- Problem-4

- Input a string of lower- and upper-case letters. If the number of lower-case letters is more than the number of upper-case letters print this string with lower-case, if the number of upper-case letters is more than the number of lower-case letters print this string with upper-case, otherwise print it with lower-case.

Input

HoUse

Input

ViP

Output

house

Output

VIP

- **Problem-5**

- Write a Java program that removes duplicates from a given 1D array and returns a new array with only the unique elements.

Input

Size:

5

1 2 1 2 3

Output

1 2 3

- **Problem-6**

- Write a Java program that finds the second largest element in a given 1D array

Input

Size:

5

4 2 8 9 10

Output

9

- Problem-7

- Write a Java program that finds the element that appears the most in a given 1D array.

Input

Size:

5

1 2 1 2 1

Output

1

- Problem-8

- you have an array of integers (at least 3 integers) , the array has one even number and the rest is odd or has one odd number and the rest is even, so your task is to print the index of the different number.

Input

Size:

5

1 7 2 3 5

Output

2



- **Problem-9 (hard)**
- mohamed has three numbers he decided to add the first and second numbers and store the result in (x1), add the first and third numbers and store the result in (x2), add the second and third numbers and store the result in (x3), add all the three numbers and store the result in (x4)  
mohamed gives you ( x1 , x2 , x3 , x4 ) and asks you to get back the three numbers

Input

3 6 5 4

Input

40 40 40 60

Output

1 2 3

Output

20 20 20

- **Problem-10 (hard)**
- Mohamed has an array of positive integer numbers (this array has at least 1 element), he asks you to get the length of the maximum non decreasing sequence HINT: non decreasing means more than or equal

Input

Size:

6

2 2 1 3 4 1

Output

3

Note: The maximum non decreasing sequence is ( 1 , 3 , 4 ) then the output is (3)