Q1)Write a program that prints a staircase of size “n”

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   #
  ##
 ###
####
```

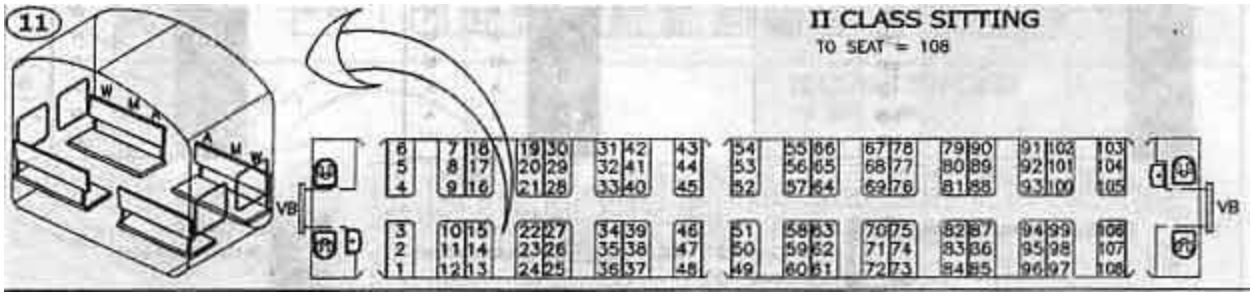
Q2) Write a program that prints the difference of sum of diagonal elements of any n * n matrix in 2D array .

For example, the square matrix is shown below:

```
1 2 3
4 5 6
9 8 9
```

Sum of left - right diagonal is 15 and sum of right-left diagonal is 17. Difference of sum of diagonals is 2 .

Q3) Akash and Vishal are quite fond of travelling. They mostly travel by railways. They were travelling in a train one day and they got interested in the seating arrangement of their compartment. The compartment looked something like



So they got interested to know the seat number facing them and the seat type facing them. The seats are denoted as follows :

- Window Seat : WS
- Middle Seat : MS
- Aisle Seat : AS

You will be given a seat number, find out the seat number facing you and the seat type, i.e. WS, MS or AS.

INPUT
First line of input will consist of a single integer T denoting number of test-cases. Each test-case consists of a single integer N denoting the seat-number.

OUTPUT
For each test case, print the facing seat-number and the seat-type, separated by a single space in a new line.

CONSTRAINTS

- $1<=T<=10^5$
- $1<=N<=108$

Sample Input :-

2

18

8

Sample Output:-

19 WS

45 AS

Q4) Given a time in 12 Hour -AM/PM format convert it to military (24-hour) time.

Sample Input :-

07:05:45PM

Sample Output :-

19:05:45

Q5)Given two strings of equal length, you have to tell whether they both strings are identical.

Two strings S1 and S2 are said to be identical, if any of the permutation of string S1 is equal to the string S2. See Sample explanation for more details.

Input :

First line, contains an integer 'T' denoting no. of test cases.

Each test consists of a single line, containing two space separated strings S1 and S2 of equal length.

Output:

- For each test case, if any of the permutation of string S1 is equal to the string S2 print YES else print NO.

Constraints:

- 1<= T <=100
- 1<= |S1| = |S2| <= 10^5
- String is made up of lower case letters only.

Note : Use Hashing Concept Only . Try to do it in O(string length) .

SAMPLE INPUT

3

sumit mitsu

ambuj jumba

abhi hibb

SAMPLE OUTPUT

YES

YES

NO

Explanation

For first test case, mitsu can be rearranged to form sumit .

For second test case, jumba can be rearranged to form ambuj .

For third test case, hibb can not be arranged to form abhi.

Q6) You have been given 3 integers - l, r and k. Find how many numbers between l and r (both inclusive) are divisible by k. You do not need to print these numbers, you just have to find their count.

Input Format

The first and only line of input contains 3 space separated integers *l*, *r* and *k*.

Output Format

Print the required answer on a single line.

SAMPLE INPUT

1 10 1

SAMPLE OUTPUT

10