Question 1:

Given coefficients of a quadratic equation, you need to print the nature of the roots (real and distinct, real and equal, imaginary).

Input Format:

First contains three coefficients a, b, c from the equation ax^2 +bx + C =0

Output format:

Output contains one/two lines. First line contains nature of roots. The next line contains roots separated by a space if they exist. If roots are imaginary do not print the roots.

Sample Input

1 -11 28

Sample Output

Real and Distinct

4 7

Question 2:

Take as input str, a string. Write a recursive function which returns a new string in which all duplicate consecutive characters are separated by a “*”.

Sample Input

Hello

Sample Output

Hel*lo

Question 3:

Take as input S, a string. Write a function that removes all consecutive duplicates. Print the value returned.

Sample Input

aabccba

Sample Output

abcba

Question 4:

Take as input S, a string. Write a function that does basic string compression. Print the value returned.

Sample input: aaabbccds

Sample Output: a3b2c3d1s1

Question 5:

Take as input a 2D array. Wave print it column-wise

Sample Input

4 4

11 12 13 14

21 22 23 24

31 32 33 34

41 42 43 44

Sample output

11,21,31,41,42,32,22,12,13,23,33,43,44,34,24,14