Python Assignment

1. WAP in python to find the root of a quadratic equation. Write proper messages and the roots if found.
2. Find GCD and LCM of a number.
3. WAP in python to print the series: 13, 16, 22, 24, 28, 36 … n terms.
4. WAP to python to print the series: 13, 17, 25, 32, 37, 47 … n terms.
5. Print the given series $1 + \frac{1x2}{1+2} + \frac{1x2x3}{1+2+3} + \frac{1x2x3x4}{1+2+3+4}$ … n terms
6. Print the following pattern

```
    5
  4 4
 3 3 3
2 2 2 2
1 1 1 1 1
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7. Print prime palindrome numbers in a list. Use user defined functions for prime number check and palindrome number check.
8. Find highest frequency number(s) of a list.
9. Delete all the Armstrong numbers of a list.
10. Rotate a list by n position to the right or left according to user choice.
11. Count and Print number of alphabets, vowels, consonants, uppercase, lowercase, digits, space, special characters, words in a string given by user.
12. Print longest word(s) of a string given by user. Do not use len() function.