Lab Exercise 1st

1. WAP to read two numbers (say x and y) and perform following operations:
   1. Display binary equivalent of the numbers
   2. Perform bitwise AND, OR and XOR operations and display their results in binary format
   3. Perform once complement of x and display the result in binary format
   4. Left shift the x by 3 positions and display the result in binary format
   5. Left shift the y by 2 positions and display the result in binary format
2. WAP to read two complex numbers from user and then perform their addition, subtraction, multiplication, and division and display the results.
3. WAP that accepts variable number of arguments from user and finds factorial of each number and then displays factorial of every number.
4. WAP that reads a string from user and then finds number of alphabets, digits, and special characters in the string.
5. WAP that reads a multi-sentence string from user. Separate each sentence in the string and display each sentence. Again separate each word in the string and display then. Comma should not be included in the words. \*(solve after re)
6. WAP to find second largest from a list of elements without using sorting.
7. WAP to count odd and even numbers in a list.
8. WAP to store name of countries in a list and then extract countries that contains substring in another list.
9. WAP to create a dictionary that contains districts and their headquarters and then extract the districts for which headquarter names in same as the district name.
10. WAP to read two sets from users and then perform set union, set intersection, and set difference operation and display results.
11. WAP to find square root of all numbers in a list using map tool.
12. WAP to extract all prime numbers from a list using filter tool.