1. Write a Java program that reads an integer between 0 and 1000 and adds all the digits in the integer.

Sample output

Input an integer between 0 and 1000: 565

Expected Output:

The sum of all digits in 565 is 16

2. Write a Java program to find the k largest elements in a given array. Elements in the array can be in any order.

Sample output:

Expected Output:

Original Array:

[1, 4, 17, 7, 25, 3, 100]

3 largest elements of the said array are:

100 25 17

- 3. Write a Java program to create a class called "Cat" with instance variables name and age. Implement a default constructor that initializes the name to "Unknown" and the age to 0. Print the values of the variables.
- 4. Write a Java program to create a class called Dog with instance variables name and color. Implement a parameterized constructor that takes name and color as parameters and initializes the instance variables. Print the values of the variables