1. Implement a Java program to create an interface called "**Number**" with a method called "**display**". Two classes "**NoDuplicate**" and "**Sum**" inherits this class. **NoDuplicate** class should remove the duplicate elements in an array. **Sum** class should calculate the sum of digits of a number. Both classes should use **display** method to print the result.

2. Implement a Java program to create a class called "**Matrix**". Use a method called "**input**" to read elements of the matrix. Use another method "**output**" to display the elements of the matrix. Inherit a class called "**MatTranspose**". Use a method called "**transpose**" to display the transpose of the matrix.

3. Implement a Java program to read two numbers in a file called "**input.txt**". Use "**output.txt**" file to display prime numbers between this given limit.