```
import java.util.Scanner;
public class Sieve {
        public static void main(String[] args)
        {
        System.out.println("\nSieve of Eratosthenes\n");
        Scanner input = new Scanner(System.in);
        System.out.print("Enter the primes upper bound ===>> ");
        final int MAX = input.nextInt();
        input.close();
        boolean[] primes = computePrimes(MAX);
        displayPrimes(primes);
        }
        public static boolean[] computePrimes(int upperBound)
        {
        // This method will compute the prime numbers
        boolean[] primeArray = new boolean[upperBound+1];
for (int i=2;i<primeArray.length;i++) {
         primeArray[i] = true;
                }
for (int p=2; p<Math.sqrt(primeArray.length);p++) {
         //if we didn't already change p, it is prime (true)
         if (primeArray[p]=true){
        //Change multiples of p to NOT prime
                 for (int i=p*p; i<primeArray.length;i=i+p)  {
                         primeArray[i]=false;
                 }
         }
        System.out.println


        }

        return primeArray;
        }
        public static void displayPrimes(boolean[] primeArray)


        {
        // This method will display the prime numbers
        }
```

```
}
```