```
public static list<Integer sieveOfEratosthenes(int n) {</pre>
bocean[] prime = new boolean[n + 1];
for (int is 0; i <= n; i++)
    prime[i] = true;
for (int p = 2; p * p <= n; p++) {
    if (prime[p]) {
        for (int i = p * p; i <= n; i += p)
            prime[i] = false;
List Integer primes = new ArrayList<>();
for (int i = 2; i <= n; i++) {
   if (p me[i])
       primes.add(i);
return primes;
```