

```
1  #pragma once
2  #include <vector>
3  using namespace std;
4
5  #define MaxB0 10000000
6  #define BITS_PER_LONG 32
7  #define BITS_PER_LONG_1 31
8  #define SIEVE_SIZE (MaxB0 / 32 + 1)
9
10 class Sieves
11 {
12 public:
13     static vector<long> FastGetAtkinPrimes(
14         long limit, long sieve[]);
15     static vector<long> FastGetEratoPrimes(
16         long limit, long sieve[]);
17     static vector<long> SlowGetAtkinPrimes(long limit);
18     static vector<long> SlowGetEratoPrimes(long limit);
19     static long GetBit(long i, long sieve[]);
20     static void SetBit(long i, long v, long sieve[]);
21 };
```