```cpp
#include<iostream>
using namespace std;

int makeSieve(int n){

 bool isPrime[n+1];
 for(int i=0;i<=n;i++){
  isPrime[i] = true;
 }
 isPrime[0] = false;
 isPrime[1] = false;

 for(int i=2;i*i<=n;i++){
  if(isPrime[i] == true){
   for(int j=i*i;j<=n;j+=i){
    isPrime[j] = false;
   }
  }
 }

 int count = 0;
 for(int i=0;i<=n;i++){
  if(isPrime[i] == true){
   count++;
  }
 }
 return count;

}
int main(){
 int n;
 cin >> n;

 int nPrimes = makeSieve(n);
 cout<<nPrimes <<endl;
 return 0;
}
```