

```
1  #include <iostream>
2
3  // Решето эратосфена
4
5  using namespace std;
6
7  int main()
8  {
9      const int size = 500;
10     int a[size];
11
12     for (int i = 0; i < size; i++)
13     {
14         a[i] = i + 1;
15     }
16
17     for (int i = 1; i < size / 2; i++)
18     {
19         if (a[i] != 0)
20         {
21             for (int j = i + a[i]; j < size; j += a[i])
22             {
23                 a[j] = 0;
24             }
25         }
26     }
27
28     for (int i = 0; i < size; i++)
29     {
30         if (a[i] != 0)
31             cout << a[i] << " ";
32     }
33
34     cout << endl;
35
36     return 0;
37 }
38
```