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1  //*****//
2  //*****string Author = "SACHIN SAINI " *****//
3  //*****//
4  #include<iostream>
5  #include<math.h>
6  using namespace std;
7  long sieve[1000001]={0};//Sieve array ,will store the the prime numbers
8  void fillsieve(void); //function that will fill the array with corresponding index
9  void applysieve(void); //apply the sieve of Erathosthenes
10 void printsieve(void);
11 int main()
12 {
13     fillsieve();
14     applysieve();
15     printsieve();
16 }
17 void fillsieve(void)
18 {
19     long i;
20     for(i=0;i<1000001;i++)
21     {
22         sieve[i]=i;
23     }
24 }
25 void applysieve(void)
26 {
27     long i=0,limit,prime,multiple,j=0;
28     limit=sqrt(1000000);
29     sieve[0]=sieve[1]=-1;
30     for(i=0;i<limit;i++)
31     {
32         if(sieve[i]!=-1)
33         {
34             prime=sieve[i];
35             j=2;
36             while(prime*j<=1000000)
37             {
38                 sieve[prime*j]=-1;
39                 j++;
40             }
41         }
42     }
43 }
44 }
45 void printsieve(void)
46 {
47     long i=0,count=0,ans=0;
48     for(i=0;i<200;i++)
49     {
50         if(sieve[i]!=-1)
51         {
52             cout<<sieve[i]<<" ";
53         }
54     }
55 }
56

```