Elite-S016-Algorithms

Solved Challenges **0/2**

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Print Prime Numbers from 2 to N

ID:11088   **Solved By 724 Users**

The program must accept an integer **N** as the input. The program must print all the prime numbers from 2 to N (inclusive of N) as output.

Boundary Condition(s):
2 <= N <= 999999

Input Format:
The first line contains the value of N.

Output Format:
The first line contains all the prime numbers from 2 to N.

Example Input/Output 1:
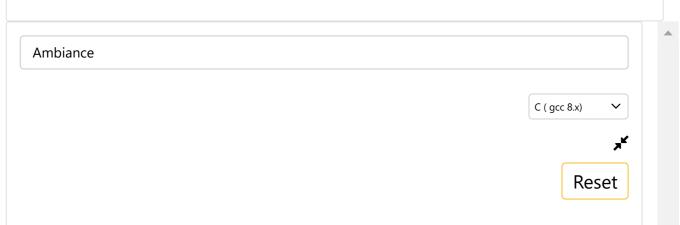Input:
11

Output:
2 3 5 7 11

Example Input/Output 2:
Input:
120

Output:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97 101 103 107 109 113

Max Execution Time Limit: 3000 millisecs

Ambiance

C (gcc 8.x)

Reset

```c
 1  #include<stdio.h>
 2  #include<stdlib.h>
 3
 4  int main()
 5  {
 6      int N;
 7      scanf("%d", &N);
 8
 9      short primearr[N+1];
10
11      for(int num=2;num<=N;num++)
12          primearr[num] = 1;
13
14      for(int val=2;val*val<=N;val++)
15      {
16          if(primearr[val]==1)
17          {
18              for(int num=val*val;num<=N;num = num+val)
19              {
20                  primearr[num] = 0;
21              }
22          }
23      }
24
25      for(int num=2;num<=N;num++)
26      {
27          if(primearr[num] == 1)
28          printf("%d ",num);
29      }
30  }
```

Code did not pass the execution   — ✕

Your Program Output:

2 3 5 7

Save   Run

☐ Run with a custom test case (Input/Output)