

```
1 #include<stdio.h>
2 void main()
3 {
4     int n,i=2,temp=0;
5     printf("enter a positive integer: ");
6     scanf("%d",&n);
7     while(i <= n/2)
8     {
9         //condition for non-prime
10        if (n%i==0)
11        {
12            temp=1;
13            break;
14        }
15    }
16    if (n==1)
17    {
18        printf("1 is a neither prime nor composite.");
19    }
20    else
21    {
22        if (temp==0)
23        {
24            printf("%d is a prime number.",n);
25        }
26        else
27        {
28            printf("%d is not a prime number.",n);
29        }
30    }
31 }
32 }
33 }
```