S.No: 12	Exp. Name: *Write a C program to find all the Prime numbers between the given limits*	Date:2023-01-06

Aim:

Write a sample code to find all the `prime numbers` between the limits.

[**Hint:** A `prime number` is a positive integer greater than 1 and which is divisible by 1 and itself only. A few prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, etc.]

At the time of execution, the program should print the message on the console as:

```
Enter lower and upper limits :
```

For example, if the user gives the **input** as:

```
Enter lower and upper limits : 10 20
```

then the program should **print** the result as:

```
Prime numbers between 10 and 20 are : 11  13  17  19
```

Note: Do use the **printf()** function with **spaces** before and after the conversional string.

Source Code:

Program12.c

```c
#include<stdio.h>
int main()
{
    int l,u,i,j,count=0;
    printf("Enter lower and upper limits : ");
    scanf("%d%d",&l,&u);
    printf("Prime numbers between %d and %d are : ",l,u);
    for(i=l;i<=u;i++)
    {
        count=0;
        for(j=2;j<=i;j++)
        {
        if(i%j==0)
        count++;
        }
    if(count==1)
    {
        printf("%d ",i);
    }
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter lower and upper limits : 3 20

Prime numbers between 3 and 20 are : 3 5 7 11 13 17 19

Test Case - 2
User Output
Enter lower and upper limits : 11 29
Prime numbers between 11 and 29 are : 11 13 17 19 23 29