S.No: 12	Exp. Name: ***Write a C program to find all the Prime numbers between the given limits***	Date:2023-01-18

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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

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

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