

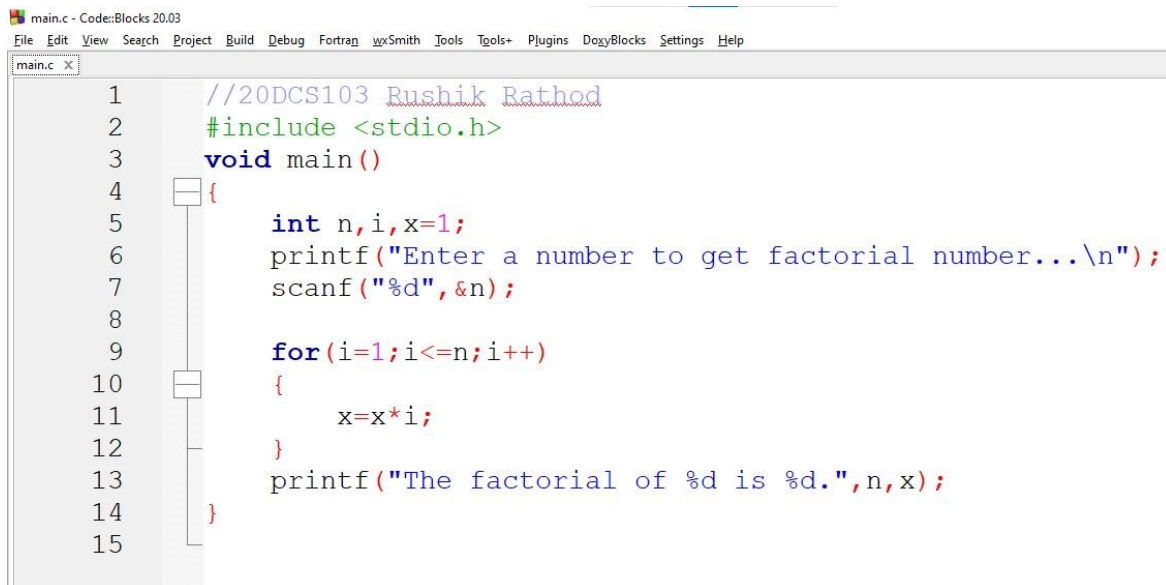
Assignment

COMPUTER CONCEPTS & PROGRAMMING

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20DCS103 DEPSTAR CSE

1. Write a C program to calculate factorial of some small positive integer number n.

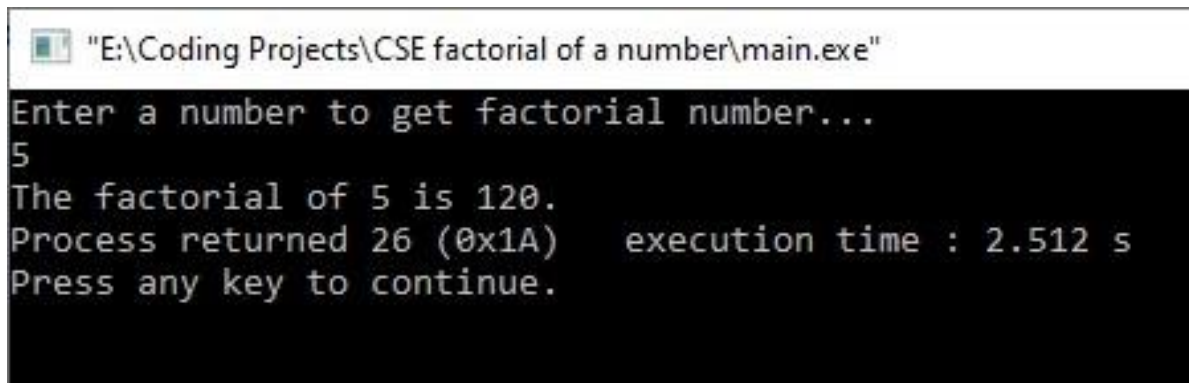
C Program:



```
main.c - Code::Blocks 20.03
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main.c x
1 //20DCS103 Rushik Rathod
2 #include <stdio.h>
3 void main()
4 {
5     int n,i,x=1;
6     printf("Enter a number to get factorial number...\n");
7     scanf("%d",&n);
8
9     for(i=1;i<=n;i++)
10    {
11        x=x*i;
12    }
13    printf("The factorial of %d is %d.",n,x);
14 }
15
```

Output:



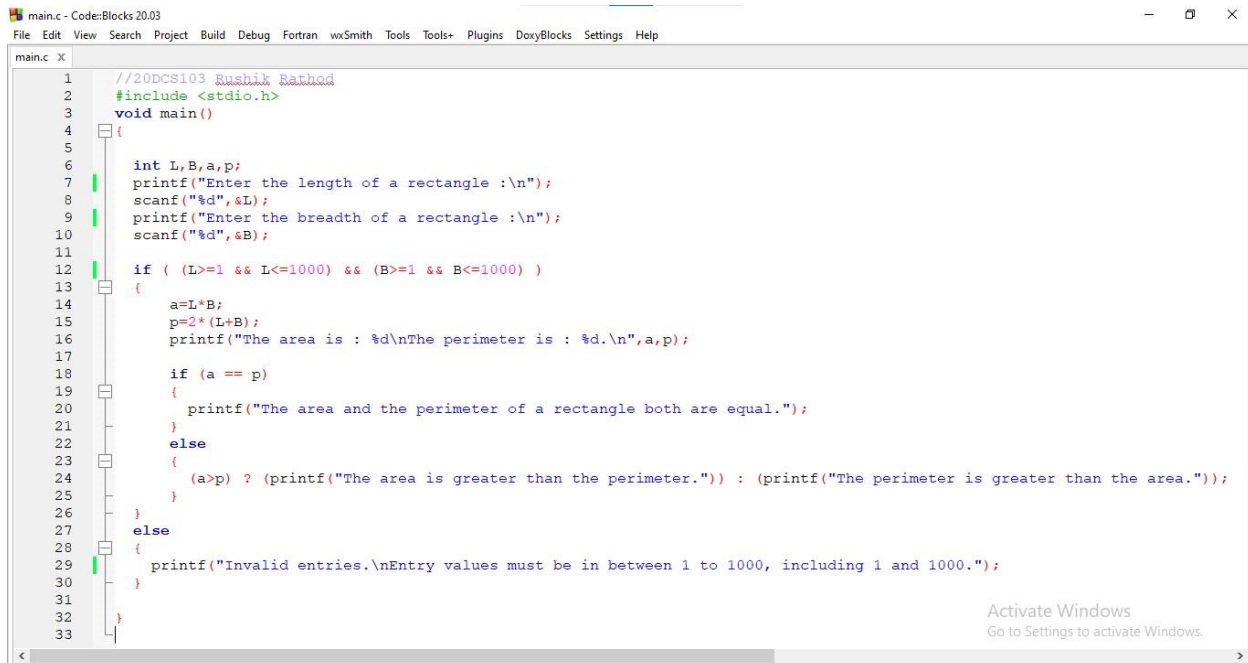
```
"E:\Coding Projects\CSE factorial of a number\main.exe"
Enter a number to get factorial number...
5
The factorial of 5 is 120.
Process returned 26 (0x1A)    execution time : 2.512 s
Press any key to continue.
```

2. Write a program to read the length (L) and breadth (B) value from keyboard of a rectangle and check whether its area is greater or perimeter is greater or both are equal.

Constraints: $1 \leq L \leq 1000$

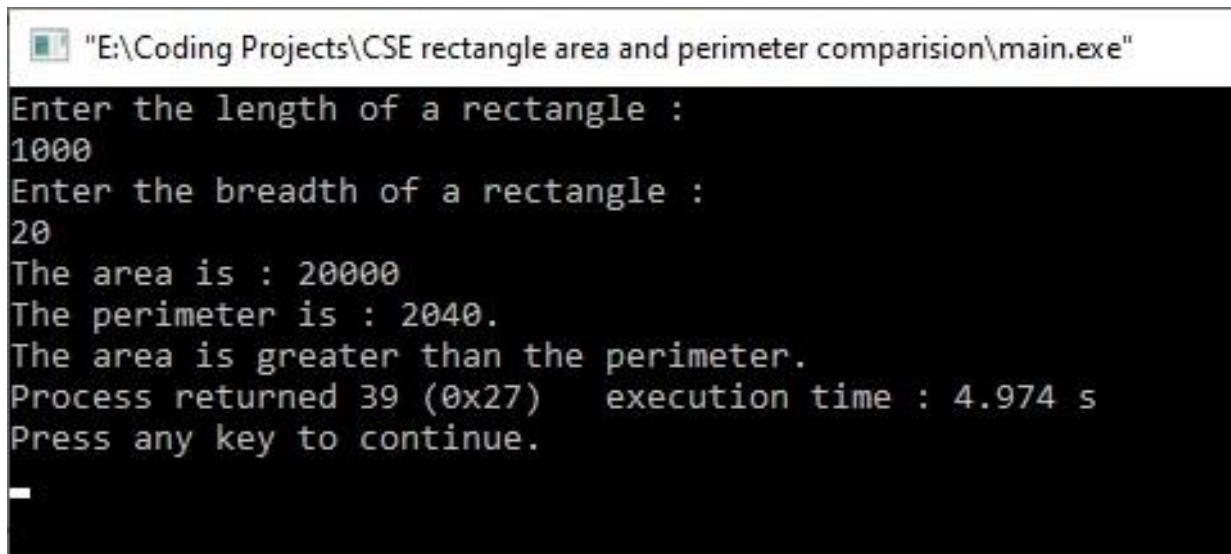
$1 \leq B \leq 1000$

C Program:



```
1 //20DCS103 Rushik Rathod
2 #include <stdio.h>
3 void main()
4 {
5
6     int L,B,a,p;
7     printf("Enter the length of a rectangle :\n");
8     scanf("%d",&L);
9     printf("Enter the breadth of a rectangle :\n");
10    scanf("%d",&B);
11
12    if ( (L>=1 && L<=1000) && (B>=1 && B<=1000) )
13    {
14        a=L*B;
15        p=2*(L+B);
16        printf("The area is : %d\nThe perimeter is : %d.\n",a,p);
17
18        if (a == p)
19        {
20            printf("The area and the perimeter of a rectangle both are equal.");
21        }
22        else
23        {
24            (a>p) ? (printf("The area is greater than the perimeter."): (printf("The perimeter is greater than the area.));
25        }
26    }
27    else
28    {
29        printf("Invalid entries.\nEntry values must be in between 1 to 1000, including 1 and 1000.");
30    }
31 }
32
33
```

Output:



```
"E:\Coding Projects\CSE rectangle area and perimeter comparision\main.exe"
Enter the length of a rectangle :
1000
Enter the breadth of a rectangle :
20
The area is : 20000
The perimeter is : 2040.
The area is greater than the perimeter.
Process returned 39 (0x27) execution time : 4.974 s
Press any key to continue.
_
```

Thank you... :)