

Aim: To write a program and calculate the factorial of a given number.

Input:

```
#include <stdio.h>
```

```
int main() {
```

```
    int num,fact,i;
```

```
    printf("Enter a number:\n");
```

```
    scanf("%d",&num);
```

```
    for(i=1;i<=num;i++)
```

```
    {
```

```
        fact=fact*i;
```

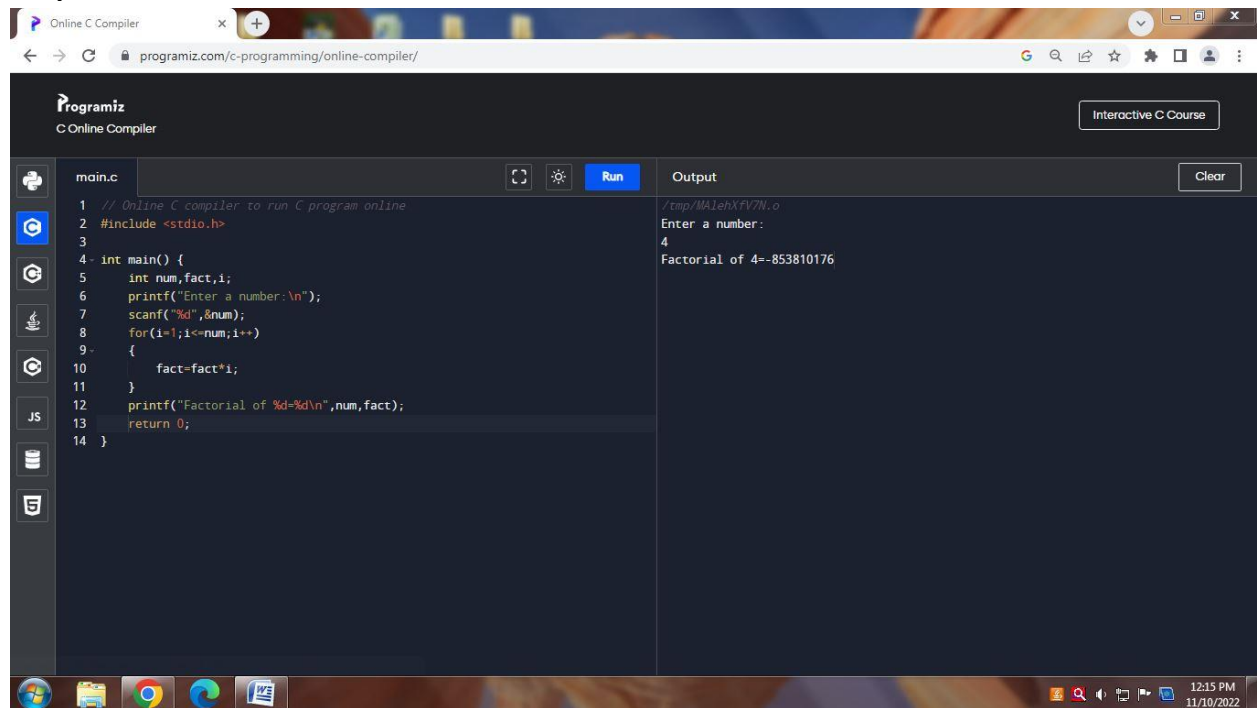
```
    }
```

```
    printf("Factorial of %d=%d\n",num,fact);
```

```
    return 0;
```

```
}
```

Output:



The screenshot displays the Programiz Online C Compiler web application. The interface is divided into two main sections: a code editor on the left and an output window on the right. The code editor contains a C program named 'main.c' that calculates the factorial of a user-input number. The program includes the standard input/output library, prompts the user for a number, and uses a for loop to calculate the factorial. The output window shows the program's execution results, including the prompt 'Enter a number:', the input '4', and the calculated factorial 'Factorial of 4=-853810176'. The browser's address bar shows the URL 'programiz.com/c-programming/online-compiler/'.

```
1 // Online C compiler to run C program online
2 #include <stdio.h>
3
4 int main() {
5     int num,fact,i;
6     printf("Enter a number:\n");
7     scanf("%d",&num);
8     for(i=1;i<=num;i++)
9     {
10         fact=fact*i;
11     }
12     printf("Factorial of %d=%d\n",num,fact);
13     return 0;
14 }
```

Output

```
/tmp/MAlchXfV7N.o
Enter a number:
4
Factorial of 4=-853810176
```

Conclusion: Successfully written program and calculated the factorial of a number.