

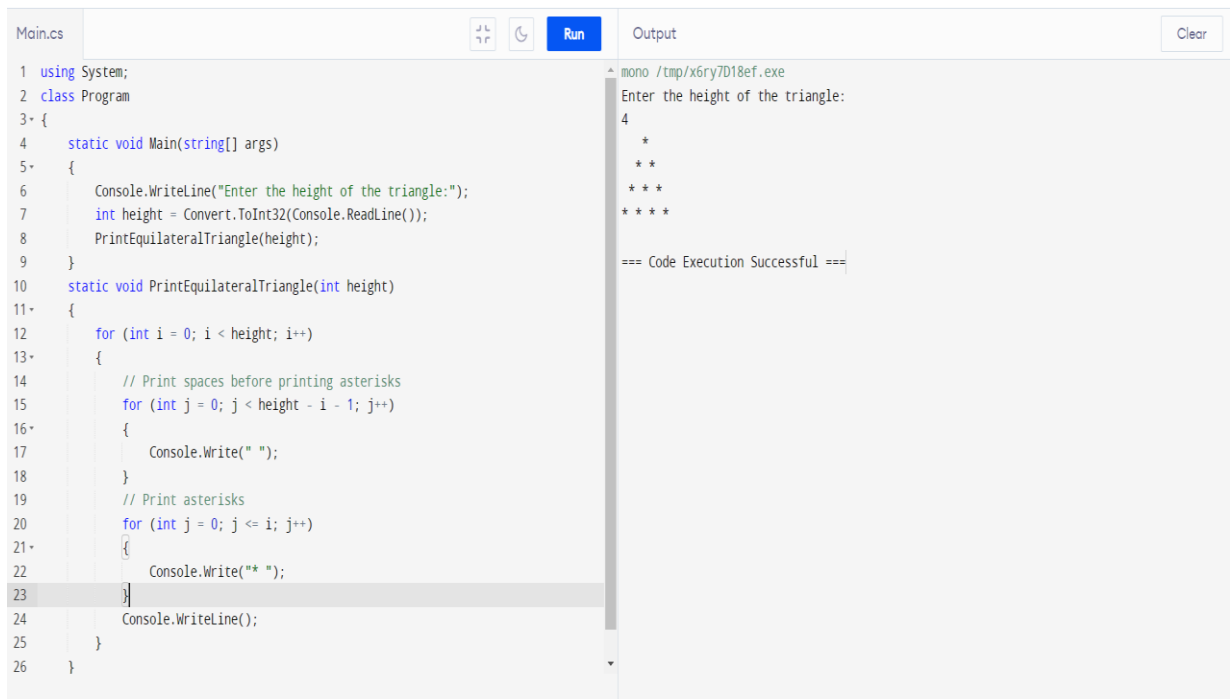
Question 1

```
using System;
class Triangle
{
    static void Main(string[] args)
    {
        Console.WriteLine("Enter the height of the triangle:");
        int height = Convert.ToInt32(Console.ReadLine());
        PrintEquilateralTriangle(height);
    }

    static void PrintEquilateralTriangle(int height)
    {
        for (int i = 0; i < height; i++)
        {
            // Print spaces before printing asterisks
            for (int j = 0; j < height - i - 1; j++)
            {
                Console.Write(" ");
            }

            // Print asterisks
            for (int j = 0; j <= i; j++)
            {
                Console.Write("* ");
            }

            Console.WriteLine();
        }
    }
}
```



```
1 using System;
2 class Program
3 {
4     static void Main(string[] args)
5     {
6         Console.WriteLine("Enter the height of the triangle:");
7         int height = Convert.ToInt32(Console.ReadLine());
8         PrintEquilateralTriangle(height);
9     }
10    static void PrintEquilateralTriangle(int height)
11    {
12        for (int i = 0; i < height; i++)
13        {
14            // Print spaces before printing asterisks
15            for (int j = 0; j < height - i - 1; j++)
16            {
17                Console.Write(" ");
18            }
19            // Print asterisks
20            for (int j = 0; j <= i; j++)
21            {
22                Console.Write("* ");
23            }
24            Console.WriteLine();
25        }
26    }
```

mono /tmp/x6ry7D18ef.exe
Enter the height of the triangle:
4
*
* *
* * *
* * * *
=== Code Execution Successful ===

Question 2

using System;

using System.Text.RegularExpressions;

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter a string:");

string input = Console.ReadLine();

string[] validDates = FindValidDatesInString(input);

Console.WriteLine("Valid dates found in the string:");

foreach (string date in validDates)

{

Console.WriteLine(date);

```
}  
}
```

```
static string[] FindValidDatesInString(string inputString)  
{  
    // Define the regular expression pattern to find valid dates (MMDDYYYY)  
    string DatePattern = @"\\b(0[1-9]|1[0-2])(0[1-9]|12|[0-9]|3[01])(19|20)\\d{2}\\b";  
  
    // Create a regex object  
    Regex regex = new Regex(DatePattern);  
  
    // Find matches in the input string  
    MatchCollection matches = regex.Matches(inputString);  
  
    // Extract matched dates  
    string[] dates = new string[matches.Count];  
    for (int i = 0; i < matches.Count; i++)  
    {  
        dates[i] = matches[i].Value;  
    }  
  
    return dates;  
}
```

Main.cs



Run

Output

Clear

```
1
2 using System;
3 using System.Text.RegularExpressions;
4
5 class Program
6 {
7     static void Main(string[] args)
8     {
9         Console.WriteLine("Enter a string:");
10        string input = Console.ReadLine();
11
12        string[] validDates = FindValidDatesInString(input);
13
14        Console.WriteLine("Valid dates found in the string:");
15        foreach (string date in validDates)
16        {
17            Console.WriteLine(date);
18        }
19    }
20
21    static string[] FindValidDatesInString(string inputString)
22    {
23        // Define the regular expression pattern to find valid dates (MMDDYYYY)
24        string DatePattern = @"^(0[1-9]|1[0-2])(0[1-9]|[12][0-9]|3[01])(19|20
25        )\d{2}\b";
```

```
mono /tmp/qf0yR3WZma.exe
Enter a string:
Today date is 30032024 tomorrow date 31032024
Valid dates found in the string:

=== Code Execution Successful ===
```