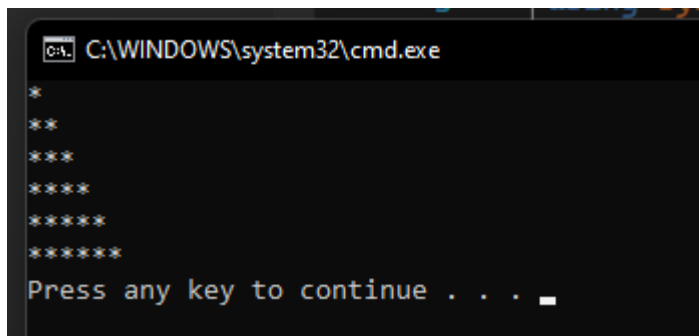


## ANSWER – 1

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            for (int i = 1; i <= 6; ++i)
            {
                for (int j = 1; j <= i; ++j)
                {
                    Console.Write("*");
                }
                Console.WriteLine();
            }
        }
    }
}
```

## OUTPUT:



## ANSWER – 2

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i, j, n;
            n = 5;
            for (i = 0; i <= n; i++)
            {
                for (j = 1; j <= n - i; j++)
```

```

        Console.Write(" ");

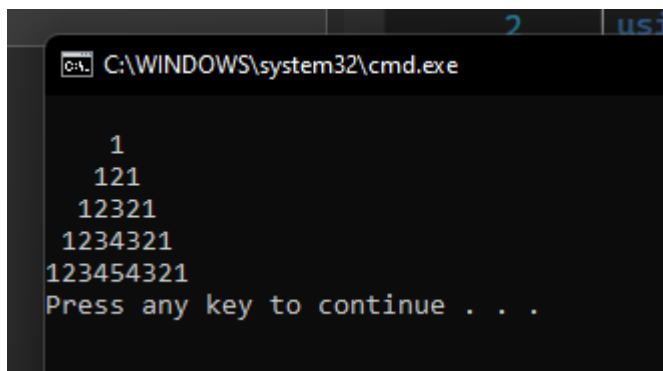
        for (j = 1; j <= i; j++)
            Console.Write("{0}", j);

        for (j = i - 1; j >= 1; j--)
            Console.Write("{0}", j);

        Console.Write("\n");
    }
}
}
}

```

**Output:**



```

C:\WINDOWS\system32\cmd.exe

1
121
12321
1234321
123454321
Press any key to continue . . .

```

### ANSWER – 3

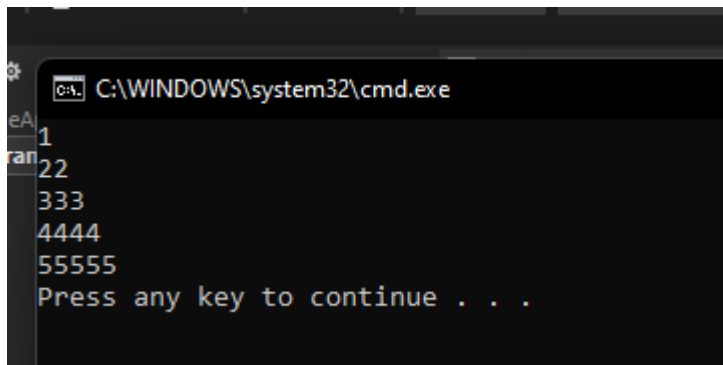
```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i, j, r;
            r = 5;
            for (i = 1; i <= r; i++)
            {
                for (j = 1; j <= i; j++)
                    Console.Write("{0}", i);
                Console.Write("\n");
            }
        }
    }
}

```

**OUTPUT:**



```
C:\WINDOWS\system32\cmd.exe
1
22
333
4444
55555
Press any key to continue . . .
```

#### ANSWER – 4

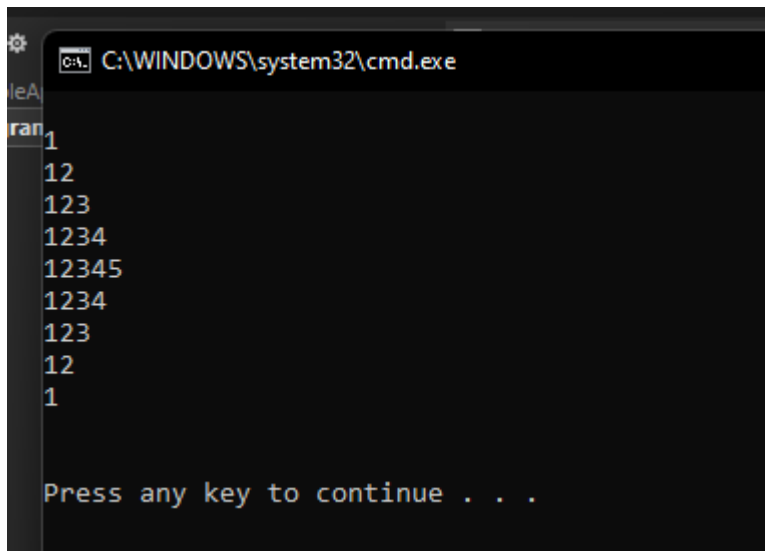
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int n = 5;

            Console.WriteLine();

            for (int i = 1; i < n; i++)
            {
                for (int j = 1; j <= i; j++)
                    Console.Write(j.ToString());
                Console.WriteLine();
            }
            for (int i = n; i >= 0; i--)
            {
                for (int j = 1; j <= i; j++)
                    Console.Write(j.ToString());
                Console.WriteLine();
            }
            Console.WriteLine();
        }
    }
}
```

#### OUTPUT:



```
C:\WINDOWS\system32\cmd.exe

1
12
123
1234
12345
1234
123
12
1

Press any key to continue . . .
```

## ANSWER – 5

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int n = 5;

            Console.WriteLine();
            for (int i = n; i >= 0; i--)
            {
                for (int j = 1; j <= i; j++)
                    Console.Write(j.ToString());
                Console.WriteLine();
            }

            for (int i = 1; i <= n; i++)
            {
                for (int j = 1; j <= i; j++)
                    Console.Write(j.ToString());
                Console.WriteLine();
            }

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

OUTPUT:

```
C:\WINDOWS\system32\cmd.exe

12345
1234
123
12
1

1
12
123
1234
12345

Press any key to continue . . .
```

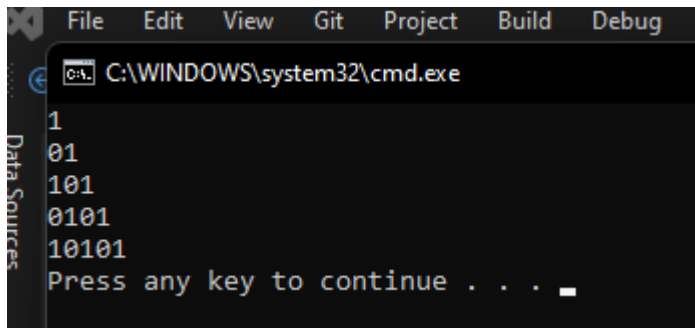
## ANSWER – 6

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i, j, n, p, q;

            n = 5;
            for (i = 1; i <= n; i++)
            {
                if (i % 2 == 0)
                { p = 1; q = 0; }
                else
                { p = 0; q = 1; }
                for (j = 1; j <= i; j++)
                {
                    if (j % 2 == 0)
                        Console.Write("{0}", p);
                    else
                        Console.Write("{0}", q);
                    Console.Write("\n");
                }
            }
        }
    }
}
```

**OUTPUT:**



```
File Edit View Git Project Build Debug
C:\WINDOWS\system32\cmd.exe
1
01
101
0101
10101
Press any key to continue . . . _
```

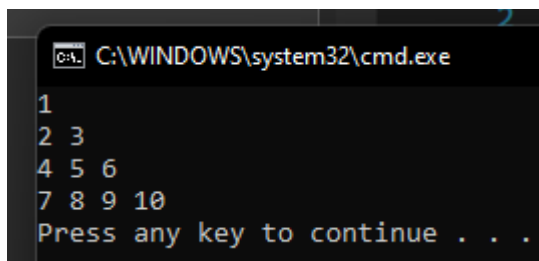
## ANSWER – 7

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i, j, rows, k = 1;

            rows = 4;
            for (i = 1; i <= rows; i++)
            {
                for (j = 1; j <= i; j++)
                {
                    Console.Write("{0} ", k++);
                    Console.Write("\n");
                }
            }
        }
    }
}
```

## OUTPUT:



```
C:\WINDOWS\system32\cmd.exe
1
2 3
4 5 6
7 8 9 10
Press any key to continue . . .
```

## ANSWER-8

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
```

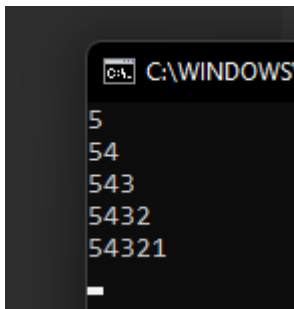
```

using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            {
                int i = 5;
                while (i >= 1)
                {
                    int j = 5;
                    while (j >= i)
                    {
                        Console.Write(j);
                        j--;
                    }
                    i--;
                    Console.WriteLine();
                }
                Console.Read();
            }
        }
    }
}

```

#### OUTPUT:



#### ANSWER – 9

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i, j, k;

            for (i = 1; i <= 7; i++)
            {
                for (j = 1; j <= i; ++j)
                    Console.Write(j);
            }
        }
    }
}

```

```

        for (k = 7 - i; k >= 1; k--)
            Console.Write("*");

        Console.Write("\n");
    }

    Console.ReadLine();
}
}
}

```

## ANSWER – 10

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

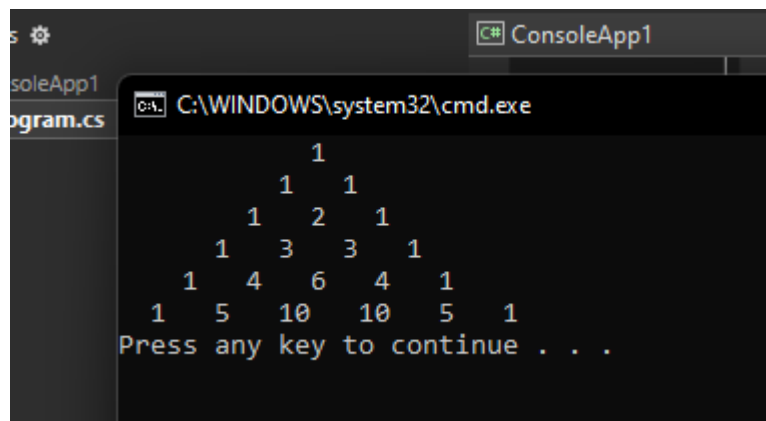
namespace ConsoleApp1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int no_row, c = 1, blk, i, j;

            no_row = 6;
            for (i = 0; i < no_row; i++)
            {
                for (blk = 1; blk <= no_row - i; blk++)
                    Console.Write(" ");
                for (j = 0; j <= i; j++)
                {
                    if (j == 0 || i == 0)
                        c = 1;
                    else
                        c = c * (i - j + 1) / j;
                    Console.Write("{0} ", c);
                }
                Console.Write("\n");
            }
        }
    }
}

```

**Output:**





The screenshot shows a Visual Studio IDE with a console window titled "ConsoleApp1". The console output displays the first six rows of Pascal's triangle, with numbers centered and separated by spaces. The rows are: 1; 1 1; 1 2 1; 1 3 3 1; 1 4 6 4 1; 1 5 10 10 5 1. Below the triangle, the text "Press any key to continue . . ." is displayed. The console window's title bar shows the path "C:\WINDOWS\system32\cmd.exe".

```
1
 1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
Press any key to continue . . .
```