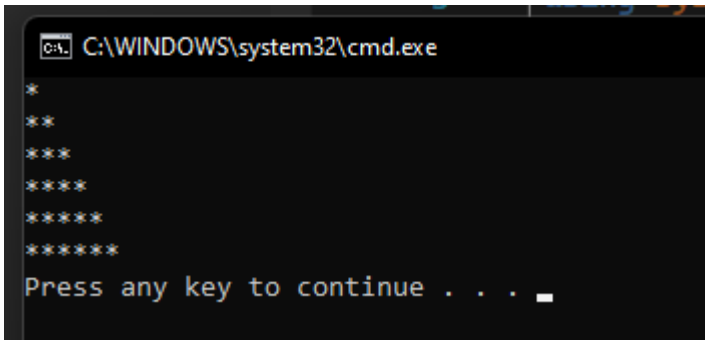
ANSWER – 1

```
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:

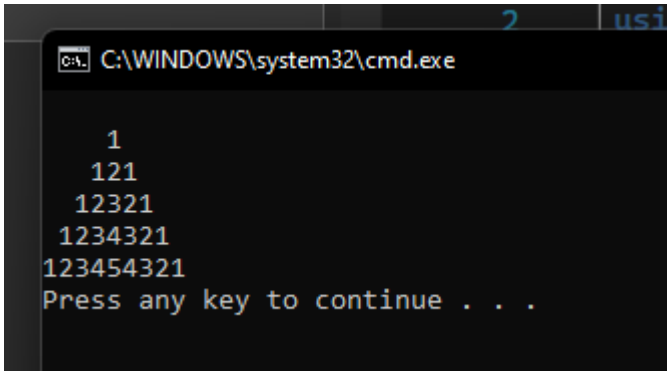


ANSWER – 2

```
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");
        }

    }
  }
}
```

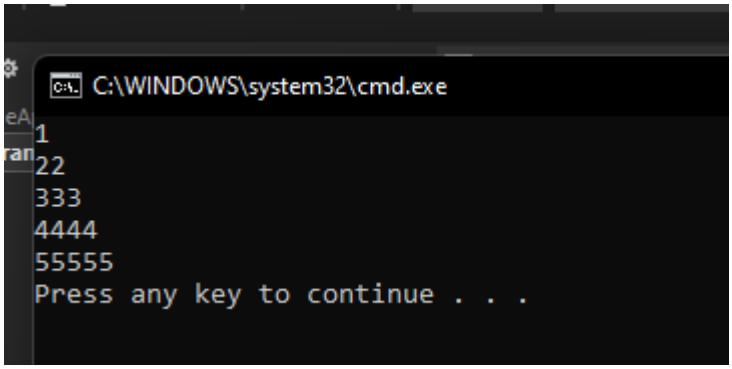
Output:



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");
      }
    }
  }
}
```

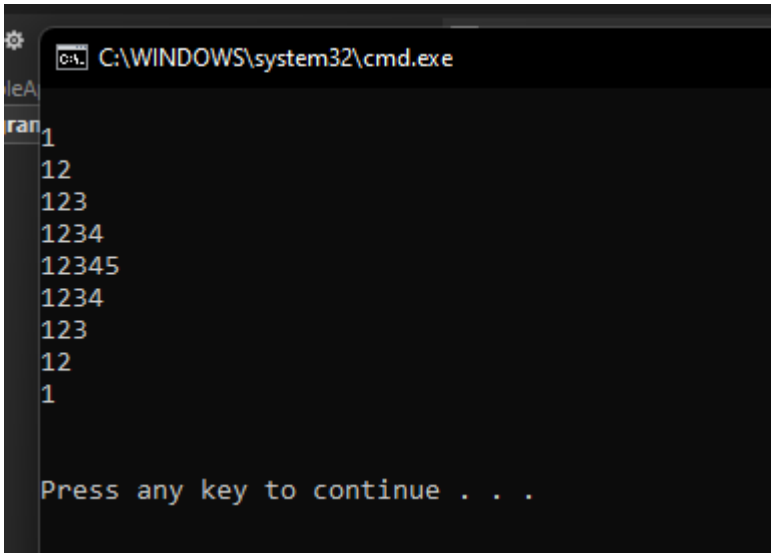
OUTPUT:



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();
      }
   }
}
```

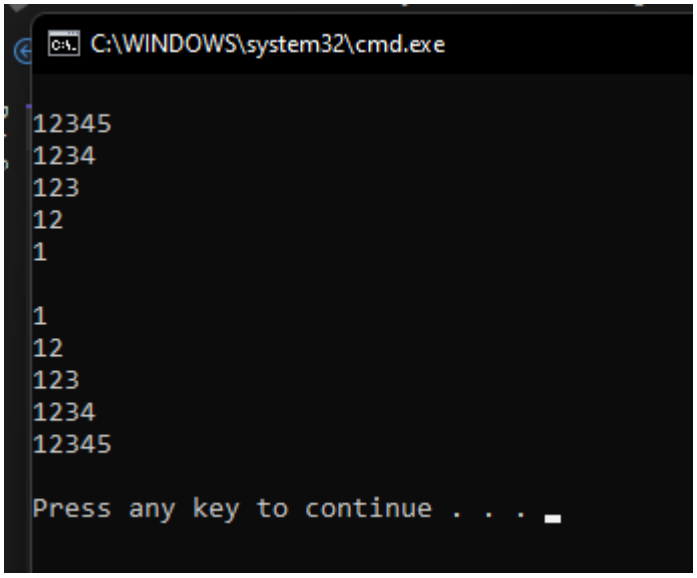
OUTPUT:



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();
      }
   }
}
```

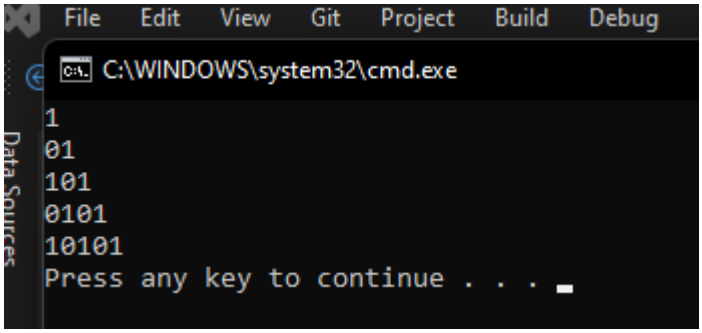
OUTPUT:



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");
         }
      }
   }
}
```

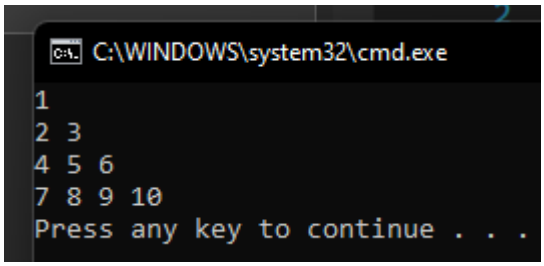
OUTPUT:



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:

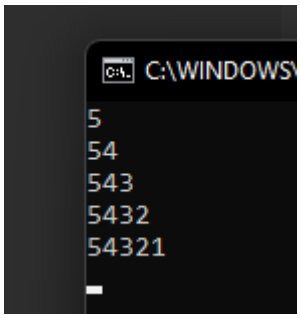


ANSWER-8

```
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

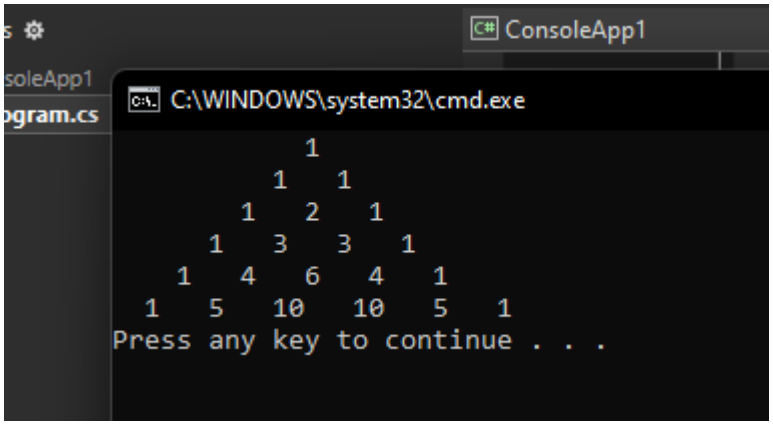
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

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:


ConsoleApp1
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 . . .