### 20 C Programming Codes

### Converted to C# Code

By Manoj Karnatapu - NB Technologies

#### Project 1

using System;

Write a C# Code to Print Multiplication Table for a given number

```
// Multiplication Tabel By @Manoj-Karnatapu(aka MK/MKN)
namespace CtoCSharpPrograms
{
   internal class Program
   {
     static void Main(string[] args)
```

//Program Logic Section

int input, i;

//Variable Declaration Section

```
Console.WriteLine("\nCode Dev by manoj karnatapu\n\n\t\t **** Multiplication Table By MK@****
\n\n Which Number of Multiplication Table, You Want me To Print : ");

//Reading Inputs Section
input = Convert.ToInt32(Console.ReadLine());
```

```
for (i = 1; i <= 10; i++)
{
    //Printing Output using String Concatination
    Console.WriteLine(input + "x" + i + "=" + input * i);
}

Console.WriteLine("\n::: Displaying Using String Formating Method by @MKN :::\n");
for (i = 1; i <= 10; i++)
{
    //Printing OutPut using String Formating
    Console.WriteLine("{0} x {1} = {2}", input, i, input * i);
}

Console.WriteLine("\nMultiplication Table By Manoj-Karnatapu@");</pre>
```

Console.WriteLine("\n::: Displaying Using String Concatination Method by @MKN :::\n");

Console.ReadLine();

Output

}

}

```
Code Dev by manoj karnatapu

**** Multiplication Table By MK@****

Which Number of Multiplication Table, You Want me To Print:

Since Displaying Using String Concatination Method by @MKN :::

9x1=9
9x2=18
9x3=27
9x4=36
9x5=45
9x5=45
9x6=54
9x7=63
9x8=72
9x9=81
9x10=90

::: Displaying Using String Formating Method by @MKN :::

9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90

Multiplication Table By Manoj-Karnatapu@

Press any key to continue . . .
```

## Project 2 Write a C# Code to Print Factorial of a given number using System; // Author: Manoj-Karnatapu@ (aka MK/MKN) // Purpose: To Read a number and print its factorial namespace CtoCSharpPrograms internal class Program static void Main(string[] args) //Variable Declaration Section int input, i, fact = 1; Console.WriteLine("\n\_\_\_:::\*\*\*\* Welcome To Find a Factorial of a Number //Reading Inputs Section Console.Write("\n\nEnter any Number, To find its Factorial: input = Convert.ToInt32(Console.ReadLine()); //Program Logic Section for (i = 1; i <= input; i++)</pre> fact = fact \* i; Console.WriteLine("\nFactorial of {0} is {1}",input, fact); Console.WriteLine("\n\n \_\_\_\_::\*\*\* Developer of this Code is Manoj.Karnatapu@ Console.ReadLine(); } } } Output C:\WINDOWS\system32\cmd.exe :::\*\*\*\* Welcome To Find a Factorial of a Number \*\*\*\*:::\_ Enter any Number, To find its Factorial : 6 Factorial of 6 is 720

\_:::\*\*\* Developer of this Code is Manoj.Karnatapu© \*\*\*:::

Press any key to continue . . . \_

# Project 3 Write a C# Code to Print Sum of N Natural Numbers using System; // Author: Manoj-Karnatapu@ (aka MK/MKN) // Purpose: To Read a number and print sum of n natural numbers upto n. namespace CtoCSharpPrograms internal class Program static void Main(string[] args) //Variable Declaration Section int input, i, sum = 0; Console.WriteLine("\n\_\_\_:::\*\*\*\* Welcome To Find a Sum of n Natural Number //Reading Inputs Section Console.Write("\n\nEnter any Number, To find Sum of (n) Natural Numbers : "); input = Convert.ToInt32(Console.ReadLine()); //Program Logic Section for (i = 1; i <= input; i++)</pre> sum = sum + i;Console.WriteLine("\nSum of {0} natural numbers is {1}",input, sum); Console.WriteLine("\n\n \_\_\_:::\*\*\* Developer of this Code is Manoj.Karnatapu@ Console.ReadLine(); } } } Output C:\WINDOWS\system32\cmd.exe :::\*\*\*\* Welcome To Find a Sum of n Natural Number \*\*\*\*::: Enter any Number, To find Sum of (n) Natural Numbers : Sum of 100 natural numbers is 5050

:::\*\*\* Developer of this Code is Manoj.Karnatapu@ \*\*\*:::

Press any key to continue . . .

```
Project 4
Write a C# Code to Print Factorial using Functions
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number and print its Factorial Using Functions.
namespace CtoCSharpPrograms
{
    internal class Program
        public static void PrintOutput(int n)
            Console.WriteLine("\nFactorial of {0} is {1}", n, Factorial(n));
        public static int Factorial(int input)
            int fact = 1, i;
for (i = 1; i <= input; i++)</pre>
                fact = fact * i;
            return fact;
        }
        static void Main(string[] args)
            //Variable Declaration Section
            int input;
            Console.WriteLine("\n___:::**** Welcome To Find Factorial Using Functions
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number, To find It's Factorial : ");
            input = Convert.ToInt32(Console.ReadLine());
            //Program Logic Section
            PrintOutput(input);
            Console.WriteLine("\n\n ____:*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
}
Output
             C:\WINDOWS\system32\cmd.exe
                _:::**** Welcome To Find Factorial Using Functions ****:::
            Enter any Number, To find It's Factorial : 5
            Factorial of 5 is 120
                 ::::*** Developer of this Code is Manoj.Karnatapu@ ***:::
            Press any key to continue . . . _
```

```
Write a C# Code to Print Factorial using Recursion
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number and print its Factorial Using Recursion.
namespace CtoCSharpPrograms
{
    internal class Program
        public static void PrintOutput(int n)
            Console.WriteLine("\nFactorial of {0} is {1}", n, Factorial(n));
        public static int Factorial(int input)
            if (input == 0)
                return 1;
            else
                return input * Factorial(input - 1);
        }
        static void Main(string[] args)
            //Variable Declaration Section
            int input;
            Console.WriteLine("\n___:::**** Welcome To Find Factorial Using Recursion
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number, To find It's Factorial : ");
            input = Convert.ToInt32(Console.ReadLine());
            //Program Logic Section
            PrintOutput(input);
            Console.WriteLine("\n\n ____::*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
}
Output
            C:\WINDOWS\system32\cmd.exe
                                                                        :::**** Welcome To Find Factorial Using Recursion ****:::
           Enter any Number, To find It's Factorial : 5
           Factorial of 5 is 120
                :::*** Developer of this Code is Manoj.Karnatapu@ ***:::
           Press any key to continue . . .
```

```
Project 6
Write a C# Code to Print Factors of a given number
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number from user and print factors of a given number.
namespace CtoCSharpPrograms
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int input, i;
            Console.WriteLine("\n___:::**** Welcome To Find Factors of the Given Number
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number, To find It's Factor:
            input = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("\nThe Factors of the Given Number are :\n");
            //Program Logic Section
            for (i = 1; i <= input; i++)</pre>
                if (input % i == 0)
                    Console.WriteLine(i);
            Console.WriteLine("\n\n ____::*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
}
Output
            C:\WINDOWS\system32\cmd.exe
               ::::**** Welcome To Find Factors of the Given Number ****:::
           Enter any Number, To find It's Factor: 16
           The Factors of the Given Number are :
           4
           16
                :::*** Developer of this Code is Manoj.Karnatapu@ ***:::
           Press any key to continue \dots
```

```
Project 7
Write a C# Code to Print POWER of a given number [a power b]
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a , b values and print [a power b] value.
namespace CtoCSharpPrograms
{
   internal class Program
       static void Main(string[] args)
           //Variable Declaration Section
           int a, b, result = 1, i;
           Console.WriteLine("\n___:::**** Welcome To Find [A Power B] ****:::
           //Reading Inputs Section
           Console.Write("\n\nEnter any Number, To find It's Power: ");
           a = Convert.ToInt32(Console.ReadLine());
           Console.Write("\n\nEnter Power Value, for {0} : \ ", a);
           b = Convert.ToInt32(Console.ReadLine());
           //Program Logic Section
           for (i = 1; i <= b; i++)
               result = result * a;
           Console.WriteLine("\nThe Value of [{0} POWER {1}] is : {2}", a, b, result);
           Console.WriteLine("\n\n ____::*** Developer of this Code is Manoj.Karnatapu@
           Console.ReadLine();
       }
   }
}
Output
             C:\WINDOWS\system32\cmd.exe
               Enter any Number, To find It's Power : 6
            Enter Power Value, for 6: 3
            The Value of [6 POWER 3] is : 216
                _:::*** Developer of this Code is Manoj.Karnatapu@ ***:::
            Press any key to continue \dots _
```

```
Write a C# Code to Print Given number is Prime Number or Not
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number and check, if it is a Prime Number or Not
namespace CtoCSharpPrograms
{
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int input, i;
            Console.WriteLine("\n___:::**** Welcome To Prime Number Checking ****:::____");
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number, To find Wether it is a Prime Number or Not
  ");
            input = Convert.ToInt32(Console.ReadLine());
            //Program Logic Section
            for (i = 2; i < input; i++)</pre>
                if (input % i == 0)
                    break;
            //Printing Output Section
            if (i == input)
                Console.WriteLine("\nYes, {0} is a Prime Number", input);
                Console.WriteLine("\nNo, {0} is Not a Prime Number", input);
            Console.WriteLine("\n\n ____:::*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
}
Output
         C:\WINDOWS\system32\cmd.exe
                                                                             :::**** Welcome To Prime Number Checking ****:::
        Enter any Number, To find Wether it is a Prime Number or Not  :  7
        Yes, 7 is a Prime Number
             :::*** Developer of this Code is Manoj.Karnatapu© ***:::_
        Press any key to continue . . .
```

```
Project 9
Write a C# Code to Check given Number is Prime Number Using Functions
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number and check, if it is a Prime Number or Not using Functions
namespace CtoCSharpPrograms
{
    internal class Program
        public static bool IsPrimeNumber(int input)
             int i;
             for (i = 2; i < input; i++)</pre>
             {
                 if (input % i == 0)
                     break;
             }
             if (i == input)
                 return true;
             else
                 return false;
        static void Main(string[] args)
             //Variable Declaration Section
             int input;
             Console.WriteLine("\n___:::**** Welcome To Prime Number Checking ****:::___");
             //Reading Inputs Section
             Console.Write("\n\nEnter any Number, To find Wether it is a Prime Number or Not
   ");
             input = Convert.ToInt32(Console.ReadLine());
             //Calling Function & Printing Output Section
             if (IsPrimeNumber(input))
                 Console.WriteLine("\nYes, {0} is a Prime Number", input);
                 Console.WriteLine("\nNo, {0} is Not a Prime Number", input);
             Console.WriteLine("\n\n ____:::*** Developer of this Code is Manoj.Karnatapu@
             Console.ReadLine();
    }
Output
                   C:\WINDOWS\system32\cmd.exe
                    __:::**** Welcome To Prime Number Checking ****:::_
                  Enter any Number, To find Wether it is a Prime Number or Not : 13
                  Yes, 13 is a Prime Number
                      :::*** Developer of this Code is Manoj.Karnatapu@ ***:::_
                  Press any key to continue \dots
```

## Project 10 Write a C# Code to Print Prime Numbers in Given Range using System; // Author: Manoj-Karnatapu@ (aka MK/MKN) // Purpose: Prime Numbers in a given range. namespace CtoCSharpPrograms internal class Program public static bool IsPrimeNumber(int input) int i; for (i = 2; i < input; i++)</pre> if (input % i == 0) break; if (i == input) return true; else return false; static void Main(string[] args) //Variable Declaration Section int a, b, i; Console.WriteLine("\n\_\_\_:::\*\*\*\* Welcome To Prime Number In A Given Range "); //Reading Inputs Section Console.Write("\n\nEnter Starting Range, To find Prime Numbers : "); a = Convert.ToInt32(Console.ReadLine()); Console.Write("\n\nEnter Ending Range, To find Prime Numbers : "); b = Convert.ToInt32(Console.ReadLine()); for (i =a; i <=b; i++)</pre> if (IsPrimeNumber(i)) Console.WriteLine(i); Console.WriteLine("\n\n \_\_\_\_:\*\*\* Developer of this Code is Manoj.Karnatapu@ Console.ReadLine(); } } Output C:\WINDOWS\system32\cmd.exe :::\*\*\*\* Welcome To Prime Number In A Given Range \*\*\*\*::: Enter Starting Range, To find Prime Numbers : 1 Enter Ending Range, To find Prime Numbers : 30

:::\*\*\* Developer of this Code is Manoj.Karnatapu@ \*\*\*:::

Press any key to continue . . . lacksquare

```
Project 11
Write a C# Code to Print Fibonacci Series
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a Number (n) & Print n Fibonacci Sequence.
namespace CtoCSharpPrograms
{
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, i, a = 0, b = 1, c;
            Console.WriteLine("\n___:::**** Welcome To Find Fibonacci Series ****:::
            //Reading Inputs Section
            Console.Write("\n\nEnter Number of Terms to be Printed(n>2) :
                                                                            ");
            n = Convert.ToInt32(Console.ReadLine());
            Console.Write("\nFibonacci Series: 0 1");
            for (i = 1; i <= n-2; i++)
                c = a + b;
                a = b;
                b = c;
                Console.Write(" {0}",c);
            Console.WriteLine("\n\n ____::*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
Output
           C:\WINDOWS\system32\cmd.exe
              :::**** Welcome To Find Fibonacci Series ****:::
          Enter Number of Terms to be Printed(n>2) : 10
          Fibonacci Series: 0 1 1 2 3 5 8 13 21 34
               _:::*** Developer of this Code is Manoj.Karnatapu© ***:::
          Press any key to continue . . .
```

```
Project 12
Write a C# Code to Check given number is Armstrong Number
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a Number and Check if it is an ARMSTRONG Number or Not.
namespace CtoCSharpPrograms
{
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, rem, m, result = 0;
            Console.WriteLine("\n___:::**** Welcome To ARMSTRONG Number Identifier
****:::____");
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number To Check, Armstrong Number or Not : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Logic Section
            m = n;
            while (m > 0)
                 rem = m % 10;
                 m = m / 10;
                 result = result + rem * rem * rem;
            }
            //Printing Output Section
            if (result == n)
                 Console.WriteLine("\nYes, {0} is an ARMSTRONG Number", n);
                 Console.WriteLine("\nNo, {0} is Not an ARMSTRONG Number", n);
            Console.WriteLine("\n\n ____::*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
Output
                     C:\WINDOWS\system32\cmd.exe
                                                                         :::**** Welcome To ARMSTRONG Number Identifier ****:::
                    Enter any Number To Check, Armstrong Number or Not : 153
                    Yes, 153 is an ARMSTRONG Number
                         :::*** Developer of this Code is Manoj.Karnatapu@ ***:::_
                     Press any key to continue . . .
```

```
Write a C# Code to Check given number is Armstrong Number Using Functions
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a Number and Check if it is an ARMSTRONG Number or Not Using Function.
namespace CtoCSharpPrograms
{
    internal class Program
        public static bool IsArmstrong(int n)
            int m, result = 0, rem;
            m = n;
            while (m > 0)
                rem = m % 10;
                m = m / 10;
                result = result + rem * rem * rem;
            //Printing Output Section
            if (result == n)
                return true;
            else
                return false;
        static void Main(string[] args)
            //Variable Declaration Section
            Console.WriteLine("\n___:::**** Welcome To ARMSTRONG Number Identifier
****:::____");
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number To Check, Armstrong Number or Not : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Function Calling Section
            if (IsArmstrong(n))
                Console.WriteLine("\nYes, {0} is an ARMSTRONG Number", n);
                Console.WriteLine("\nNo, {0} is Not an ARMSTRONG Number", n);
            Console.WriteLine("\n\n ____:*** Developer of this Code is Manoj.Karnatapu@
            Console.ReadLine();
        }
    }
Output
               C:\WINDOWS\system32\cmd.exe
                                                                         П
                  ::::*** Welcome To ARMSTRONG Number Identifier ****:::
              Enter any Number To Check, Armstrong Number or Not : 143
              No, 143 is Not an ARMSTRONG Number
                   :::*** Developer of this Code is Manoj.Karnatapu@ ***:::_
              Press any key to continue \dots
```

Write a C# Code to Print Armstrong Numbers in given range

```
Code
```

```
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: ARMSTRONG Numbers in a given Range.
namespace CtoCSharpPrograms
    internal class Program
        public static bool IsArmstrong(int n)
            int m, result = 0, rem;
            m = n;
            while (m > 0)
            {
                rem = m % 10;
                m = m / 10;
                result = result + rem * rem * rem;
             //Printing Output Section
            if (result == n)
                return true;
            else
                return false;
        static void Main(string[] args)
             //Variable Declaration Section
            int a, b, i;
            Console WriteLine("\n___:::**** Welcome To ARMSTRONG Number Identifier ****:::___");
             //Reading Inputs Section
            Console.Write("\n\nEnter Starting Range of Numbers To Check, Armstrong Number : ");
            a = Convert.ToInt32(Console.ReadLine());
Console.Write("\n\nEnter Ending Range of Numbers To Check, Armstrong Number : ");
            b = Convert.ToInt32(Console.ReadLine());
            Console.Write("\n The ArmStrong Numbers in the Given Range {0} to {1} are :",a,b);
            for (i = a; i <= b; i++)</pre>
                 if (IsArmstrong(i))
                     Console.Write(" {0}",i);
            Console.WriteLine("\n\n ____:::*** Developer of this Code is Manoj.Karnatapu@ ***:::____");
            Console.ReadLine();
        }
    }
```

Output

```
Project 15
Write a C# Code to Print Sum of Digits in a given number
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number from user and Print Sum of Digits.
namespace CtoCSharpPrograms
{
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, m, rem, result = 0;
            Console.WriteLine("\n___:::**** Welcome To SUM Of Digits In a Given Number
****:::____");
            //Reading Inputs Section
            Console.Write("\n\nEnter a Number to Find Its Sum of Digits : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Logic Section
            m = n;
            while (m > 0)
                rem = m % 10;
                m = m / 10;
                result = result + rem;
            Console.Write("\nSum of Digits of {0} is {1}",n, result);
            Console.WriteLine("\n\n ___:::*** Developer of this Code is Manoj.Karnatapu @
            Console.ReadLine();
        }
    }
Output
                 C:\WINDOWS\system32\cmd.exe
                   _:::**** Welcome To SUM Of Digits In a Given Number ****:::
                Enter a Number to Find Its Sum of Digits : 786
                Sum of Digits of 786 is 21
                    _:::*** Developer of this Code is Manoj.Karnatapu © ***:::_
                Press any key to continue . . .
```

```
Project 16
Write a C# Code to Print Reverse of a Given Number
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read a number from user and Print Reversed format of it.
namespace CtoCSharpPrograms
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, rev = 0, rem, m;
            Console.WriteLine("\n___:::**** Welcome To Reversing of a Given Number
****:::____");
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number to Reverse It : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Logic Section
            m = n;
            while (m > 0)
                rem = m % 10;
                m = m / 10;
                rev = rev * 10 + rem;
            }
            Console.Write("\nReversing of {0} is {1}",n , rev);
            Console.WriteLine("\n\n ___:::*** Developer of this Code is Manoj.Karnatapu @
            Console.ReadLine();
        }
    }
Output
             C:\WINDOWS\system32\cmd.exe
                _:::**** Welcome To Reversing of a Given Number ****:::_
            Enter any Number to Reverse It : 34567
            Reversing of 34567 is 76543
                 _:::*** Developer of this Code is Manoj.Karnatapu @ ***:::_
            Press any key to continue . . . _
```

```
Project 17
Write a C# Code to Print given number is Palindrome Number or Not
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Read and Check If it is Palindrome Number or Not.
namespace CtoCSharpPrograms
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, rev = 0, rem, m;
            Console.WriteLine("\n___:::**** Welcome To Plaindrome Numbers ****:::
            //Reading Inputs Section
            Console.Write("\n\nEnter any Number to Check, If It is a Palindrome ? : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Logic Section
            m = n;
            while (m > 0)
                rem = m % 10;
                m = m / 10;
                rev = rev * 10 + rem;
            }
            if (n == rev)
                Console.WriteLine("Yes, {0} Is a Palindrome Number", n);
                Console.WriteLine("No, {0} is Not a Palindrome Number", n);
            Console.WriteLine("\n\n ___:::*** Developer of this Code is Manoj.Karnatapu @
            Console.ReadLine();
        }
    }
Output
           C:\WINDOWS\system32\cmd.exe
               :::**** Welcome To Plaindrome Numbers ****:::
          Enter any Number to Check, If It is a Palindrome ? : 1991
           Yes, 1991 Is a Palindrome Number
               _:::*** Developer of this Code is Manoj.Karnatapu © ***:::
          Press any key to continue . . .
```

```
Project 18
Write a C# Code to Swap Numbers using Third Variable
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Swap data of Two Variables By Using Third Variable.
namespace CtoCSharpPrograms
{
    internal class Program
        static void Main(string[] args)
             //Variable Declaration Section
            int a = 5, b = 8, t;
            Console.WriteLine("\n___:::**** Welcome To Swapping Of Two Variables Using
Third Variable ****:::____");
            Console.WriteLine("\nBefore Swap : ");
             Console.WriteLine("\t a = \{0\}, b = \{1\}", a, b);
            //Logic Section
            t = a;
             a = b;
             b = t;
             //Printing Output Section
            Console.WriteLine("\nAfter Swap : ");
Console.WriteLine("\t a = {0} , b = {1}", a, b);
            Console.WriteLine("\n\n ___:::*** Developer of this Code is Manoj.Karnatapu ©
***:::____");
            Console.ReadLine();
        }
    }
Output
         C:\WINDOWS\system32\cmd.exe
                                                                                       _:::**** Welcome To Swapping Of Two Variables Using Third Variable ****:::
        Before Swap :
                  a = 5, b = 8
        After Swap :
                  a = 8, b = 5
             _:::*** Developer of this Code is Manoj.Karnatapu © ***:::__
        Press any key to continue . . . _
```

```
Project 19
Write a C# Code to Swap Numbers without using Third Variable
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Swap data of Two Variables Without Using Third Variable.
namespace CtoCSharpPrograms
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int a = 5, b = 8;
            Console.WriteLine("\n___:::**** Welcome To Swapping Of Two Variables Without
Third Variable ****:::____");
            Console.WriteLine("\nBefore Swap : ");
            Console.WriteLine("\t a = \{0\}, b = \{1\}", a, b);
            //Logic Section
            a = a + b;
            b = a - b;
a = a - b;
            //Printing Output Section
            Console.WriteLine("\nAfter Swap : ");
            Console.WriteLine("\t a = \{0\}, b = \{1\}", a, b);
            Console.WriteLine("\n\n ____:::*** Developer of this Code is Manoj.Karnatapu ©
            Console.ReadLine();
        }
    }
Output
      C:\WINDOWS\system32\cmd.exe
                                                                                   _:::**** Welcome To Swapping Of Two Variables Without Third Variable ****:::_
     Before Swap :
              a = 5, b = 8
     After Swap :
              a = 8, b = 5
          _:::*** Developer of this Code is Manoj.Karnatapu © ***:::__
     Press any key to continue . . .
```

```
Project 20
Write a C# Code to Print Stars(*) in a - Right Angled Triangle Pattern
using System;
// Author: Manoj-Karnatapu@ (aka MK/MKN)
// Purpose: To Print Stars (*) in a Right Angled Triangle.
namespace CtoCSharpPrograms
    internal class Program
        static void Main(string[] args)
            //Variable Declaration Section
            int n, i, j;
            Console.WriteLine("\n___:::**** Welcome To Printing Right Angle Triangle Using
Stars ****:::____");
            Console.Write("\n Enter no. of rows to be Printed : ");
            n = Convert.ToInt32(Console.ReadLine());
            //Logic Section
            for (i = 1; i <= n; i++)
                for (j = 1; j <= i; j++)
                    Console.Write("* ");
                Console.Write("\n");
            }
            Console.WriteLine("\n\n ___:::*** Developer of this Code is Manoj.Karnatapu @
            Console.ReadLine();
        }
    }
}
Output
         C:\WINDOWS\system32\cmd.exe
            _:::**** Welcome To Printing Right Angle Triangle Using Stars ****:::
         Enter no. of rows to be Printed: 6
             :::*** Developer of this Code is Manoj.Karnatapu © ***:::_
        Press any key to continue . . .
```