**1st Program:**

using System;

namespace MyApplication

{

class Calculator

{

//Addition

public static int Addition(int input\_1, int input\_2)

{

int result = input\_1 + input\_2;

return result;

}

//Substraction

public static int Subtraction(int input\_1, int input\_2)

{

int result = input\_1 + input\_2;

return result;

}

//Multiplication

public static int Multiplication(int input\_1, int input\_2)

{

int result = input\_1 \* input\_2;

return result;

}

//Division

public static int Division(int input\_1, int input\_2)

{

int result = input\_1 + input\_2;

return result;

}

public static void Main(string[] args)

{

Console.WriteLine("Please select the number");

Console.WriteLine("Press 1 for Addition");

Console.WriteLine("Press 2 for Subtraction");

Console.WriteLine("Press 3 for Multiplication");

Console.WriteLine("Press 4 for Division \n");

int action = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 1st input");

int input\_1 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 2nd input");

int input\_2 = Convert.ToInt32(Console.ReadLine());

int result = 0;

switch (action)

{

case 1:

{

result = Addition(input\_1, input\_2);

break;

}

case 2:

{

result = Subtraction(input\_1, input\_2);

break;

}

case 3:

{

result = Multiplication(input\_1, input\_2);

break;

}

case 4:

{

result = Division(input\_1, input\_2);

break;

}

default:

Console.WriteLine("Wrong action!! try again");

break;

}

Console.WriteLine("The result is {0}", result);

Console.ReadKey();

}

}

}

**2nd Program :**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Marks

{

internal class MarksProgram

{

public static void Main(string[] args)

{

int highestScore = 0;

int marksData = 0;

int totalData=0;

int avgData=0;

Console.WriteLine("enter marks of students :");

for (int i=0;i<5; i++)

{

marksData = Convert.ToInt32(Console.ReadLine());

totalData += marksData;

if(marksData> highestScore)

{

highestScore = marksData;

avgData = totalData / 5;

}

}

Console.WriteLine("The highest marks is : {0}",highestScore);

Console.WriteLine("The average marks is : {0}", avgData);

}

}

}

**3rd Program :**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Params

{

internal class ParamsProgram

{

public static int Add(params int[] Numbers)

{

int total = 0;

foreach(int i in Numbers)

{

total = i + total;

}

Console.WriteLine("the total is : {0}", total);

return total;

}

public static void Main(string[] args)

{

int x = Add(10, 20, 30, 40);

}

}

}

**4th Program :**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Swap

{

internal class SwappingIntegers

{

public static void Main(string[] args)

{

int num1, num2, temp;

Console.Write("\nEnter the First Number : ");

num1 = Convert.ToInt32(Console.ReadLine());

Console.Write("\nEnter the Second Number : ");

num2 = Convert.ToInt32(Console.ReadLine());

temp = num1;

num1 = num2;

num2 = temp;

Console.Write("\nAfter Swapping : ");

Console.Write("\nFirst Number : " + num1);

Console.Write("\nSecond Number : " + num2);

Console.Read();

}

}

}

**5th Program :**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Circle

{

internal class CircleRadius

{

public static void Main(string[] args)

{

double radius, AREA;

const double PI = 3.14;

Console.WriteLine("Program to calculate the area and circumference of a circle");

Console.Write("\nEnter the radius of circle ");

radius = Convert.ToDouble(Console.ReadLine());

AREA = PI \* radius \* radius;

Console.WriteLine("\nThe area of circle is {0} when radius is {1}", AREA, radius);

Console.WriteLine("\nThe circumference of circle is {0}", 2 \* PI \* radius);

}

}

}