Assignment 1

1.. Program to display a welcome message on the screen using String type variable declaration and assignment. Value of message should be entered from the keyboard.

using System;

namespace ConsoleApp1

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter Welcome message");

String x = Console.ReadLine() ;

Console.WriteLine(x);

}

}

}

2. Program to declare an integer variable and assign an integer value and display the same on the computer console.

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

int x = 100;

Console.WriteLine(x);

}

}

}

3. Program to perform addition between two numbers.Numbers should be entered by the user.

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter two numbers : ");

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

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

int Sum = x + y;

Console.WriteLine("Sum is : "+" "+ Sum);

}

}

}

4. Program to perform subtraction between two numbers. Numbers should be entered by the user

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter two numbers : ");

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

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

int Sub= x - y;

Console.WriteLine("Sum is : "+" "+ Sub);

}

}

}

5. Program to perform multiplication between two numbers. Numbers should be entered by the user

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter two numbers : ");

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

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

int mul= x \* y;

Console.WriteLine("Multiplication is : "+" "+ mul);

}

}

}

6. Program to perform division between two numbers. Numbers should be entered by the user

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter two numbers : ");

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

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

int div= x / y;

Console.WriteLine("Quotient is : "+" "+ div);

}

}

}

7. Write a single program to perform all arithmetic operations. Numbers should be entered by the user

 Addition

 Subtraction

 Multiplication

 Division

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter two numbers for addition: ");

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

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

int add = x + y;

Console.WriteLine("Addition of numbers is : " + " " + add);

Console.WriteLine("Enter two numbers for subtraction: ");

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

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

int sub = a - b;

Console.WriteLine("Subtraction of two number is : " + " " + sub);

Console.WriteLine("Enter two numbers for multiplication : ");

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

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

int mul = p \* q;

Console.WriteLine("Multiplication of two numbers is : " + " " + mul);

Console.WriteLine("Enter two numbers for division: ");

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

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

int div= i / j;

Console.WriteLine("Quotient is : "+" "+ div);

}

}

}

8. Write a program (WAP) to calculate sum of three numbers.

Numbers should be entered by the user

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter three numbers for addition: ");

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

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

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

int add = x + y + z;

Console.WriteLine("Addition of numbers is : " + " " + add);

}

}

}

9. Write a program to calculate average of three numbers. Numbers should be entered by the user

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter three numbers for Average: ");

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

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

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

int avg = (x + y + z)/3;

Console.WriteLine("Average of numbers is : " + " " + avg);

}

}

}

10. Calculate Rectangle Area using C#. the value of length and width should be entered by the user.

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter length: ");

float x = Convert.ToSingle(Console.ReadLine());

Console.WriteLine("Enter breadth: ");

float y = Convert.ToSingle(Console.ReadLine());

float area = x \* y;

Console.WriteLine("Area of rectangle is is : " + " " + area);

}

}

}

Output:

Enter length:

2.5

Enter breadth:

4.5

Area of rectangle is is : 11.25

Press any key to continue . . .\

11. Calculate Rectangle Perimeter using C#

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter length: ");

float x = Convert.ToSingle(Console.ReadLine());

Console.WriteLine("Enter breadth: ");

float y = Convert.ToSingle(Console.ReadLine());

float peri = 2 \* (x + y);

Console.WriteLine("Perimeter of rectangle is is : " + " " + peri);

}

}

}

Output:

Enter length:

5

Enter breadth:

4

Perimeter of rectangle is is : 18

Press any key to continue . . .

12. Calculate Circle Area using C#

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter Radius : ");

float x = Convert.ToSingle(Console.ReadLine());

float y = 3.14f;

float a = y \* ( x \* x);

Console.WriteLine("Area of circle is is : " + " " + a);

}

}

}

Output:

Enter Radius :

4

Area of Circle is is : 50.24

Press any key to continue . . .

13. Calculate Circle Perimeter using C#

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter Radius : ");

float x = Convert.ToSingle(Console.ReadLine());

float y = 3.14f;

float a = 2\*y\*x;

Console.WriteLine("Perimeter of Circle is is : " + " " + a);

}

}

}

Output:

Enter Radius :

5

Perimeter of Circle is is : 31.4

Press any key to continue . . .

14. Write a program to convert celcius to fahrenheit:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter temperature in Celsius: ");

double celsius = Convert.ToDouble(Console.ReadLine());

double fahrenheit = (celsius \* 9 / 5) + 32;

Console.WriteLine($"Temperature in Fahrenheit: {fahrenheit}");

}

}

}

Output:

Enter temperature in Celsius:

56

Temperature in Fahrenheit: 132.8

Press any key to continue . . .

15. Write a program to convert fahrenheit to celcius:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter temperature in Fahrenheit: ");

double fahrenheit = Convert.ToDouble(Console.ReadLine());

double celsius = (fahrenheit - 32) \* 5 / 9;

Console.WriteLine($"Temperature in Celsius: {celsius}");

}

}

}

Output :

Enter temperature in Fahrenheit:

8

Temperature in Celsius: -13.3333333333333

Press any key to continue . . .

16. Write a program to calculate simple interest .

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main()

{

double principal, rate, time, simpleInterest;

Console.Write("Enter the principal amount: ");

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

Console.Write("Enter the annual interest rate (in percentage): ");

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

Console.Write("Enter the time period (in years): ");

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

simpleInterest = (principal \* rate \* time) / 100;

Console.WriteLine("\nSimple Interest = " + simpleInterest);

}

}

}

Output :

Enter the principal amount: 5000

Enter the annual interest rate (in percentage): 5

Enter the time period (in years): 1

Simple Interest = 250

Press any key to continue . . .

17. write a program to calculate square of a number.

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main()

{

Console.Write("Enter the Number : : ");

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

int sq = x \* x;

Console.WriteLine("Square of a Number is : " + sq);

}

}

}

Output:

Enter the Number : : 8

Square of a Number is : 64

Press any key to continue . . .

18. write a program to calculate cube of a number.

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main()

{

Console.Write("Enter the Number : : ");

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

int sq = x \* x \* x;

Console.WriteLine("Cube of a Number is : " + sq);

}}}

Output:

Enter the Number : : 5

Cube of a Number is : 125

Press any key to continue . . .

21. WAP to welcome a user with his or her name

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

internal class Program

{

static void Main()

{

Console.Write("Please enter your name: ");

string userName = Console.ReadLine();

Console.WriteLine($"Welcome, {userName}!");

}

}

}

Output :

Please enter your name: Tiara

Welcome, Tiara!

Press any key to continue . . .