IDE-LAB2

02/09/2020

1)

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello World!");

}

}

}

OUTPUT: Hello world!

2)

CONSOusing System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello charan!");

}

}

}

OUTPUT: Hello charan!

3)

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "charan";

Console.WriteLine("Hello " + name + "!");

}

}

}

OUTPUT: Hello charan!

4)

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "charan";

Console.WriteLine($"Hello {name}!");

}

}

}

OUTPUT: Hello charan!

5)

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "charan";

Console.WriteLine($"Hello {name.ToUpper()}!");

}

}

}

OUTPUT: Hello CHARAN!

6)

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var names = new List<string> { "charan", "Felipe", "Emillia" };

foreach (var name in names)

Console.WriteLine($"Hello {name.ToUpper()}!");

}

}

}

OUTPUT: Hello CHARAN!  
 Hello FELIPE!  
 Hello EMILLIA!

7)

int a = 18;

int b = 6;

int c = a + b;

Console.WriteLine(c);

c = a - b;

Console.WriteLine(c);

c = a \* b;

Console.WriteLine(c);

c = a / b;

Console.WriteLine(c);

OUTPUT:

24

12

108

3

8)

int a = 5;

int b = 4;

int c = 2;

int d = a + b \* c;

Console.WriteLine(d);

d = (a + b) \* c;

Console.WriteLine(d);

d = (a + b) - 6 \* c + (12 \* 4) / 3 + 12;

Console.WriteLine(d);

d = (a + b) / c;

Console.WriteLine(d);

OUTPUT:

13

18

25

4

9)

int a = 7;

int b = 4;

int c = 3;

int d = (a + b) / c;

int e = (a + b) % c;

Console.WriteLine($"quotient: {d}");

Console.WriteLine($"remainder: {e}");

int max = int.MaxValue;

int min = int.MinValue;

Console.WriteLine($"The range of integers is {min} to {max}");

int what = max + 3;

Console.WriteLine($"An example of overflow: {what}");

OUTPUT:

quotient: 3remainder: 2

The range of integers is -2147483648 to 2147483647

An example of overflow: -2147483646

10)

double a = 5;

double b = 4;

double c = 2;

double d = (a + b) / c;

Console.WriteLine(d);

double max = double.MaxValue;

double min = double.MinValue;

Console.WriteLine($"The range of double is {min} to {max}");

double third = 1.0 / 3.0;

Console.WriteLine(third);

OUTPUT:

4.5

The range of double is -1.79769313486232E+308 to 1.79769313486232E+308

0.333333333333333

11)

decimal min = decimal.MinValue;

decimal max = decimal.MaxValue;

Console.WriteLine($"The range of the decimal type is {min} to {max}");

double a = 1.0;

double b = 3.0;

Console.WriteLine(a / b);

decimal c = 1.0M;

decimal d = 3.0M;

Console.WriteLine(c / d);

OUTPUT:

The range of the decimal type is -79228162514264337593543950335 to 79228162514264337593543950335

0.333333333333333

0.3333333333333333333333333333

12)

double radius = 2.50;

double area = Math.PI \* radius \* radius;

Console.WriteLine(area);

OUTPUT:

19.6349540849362

LOOPS

13)

int a = 5;

int b = 6;

if (a + b > 10)

Console.WriteLine("The answer is greater than 10.");

OUTPUT:

The answer is greater than 10.

14)

int a = 5;

int b = 3;

if (a + b > 10)

Console.WriteLine("The answer is greater than 10");

else

Console.WriteLine("The answer is not greater than 10");

OUTPUT:

The answer is not greater than 10

15)

int a = 5;

int b = 3;

int c = 4;

if ((a + b + c > 10) || (a == b))

{

Console.WriteLine("The answer is greater than 10");

Console.WriteLine("Or the first number is equal to the second");

}

else

{

Console.WriteLine("The answer is not greater than 10");

Console.WriteLine("And the first number is not equal to the second");

}

OUTPUT:

The answer is greater than 10Or the first number is equal to the second

16)

int counter = 0;

while (counter < 10)

{

Console.WriteLine($"Hello World! The counter is {counter}");

counter++;

}

OUTPUT:

Hello World! The counter is 0

Hello World! The counter is 1

Hello World! The counter is 2

Hello World! The counter is 3

Hello World! The counter is 4

Hello World! The counter is 5

Hello World! The counter is 6

Hello World! The counter is 7

Hello World! The counter is 8

Hello World! The counter is 9

17)

for(int counter = 0; counter < 10; counter++)

{

Console.WriteLine($"Hello World! The counter is {counter}");

}

OUTPUT:

Hello World! The counter is 0

Hello World! The counter is 1

Hello World! The counter is 2

Hello World! The counter is 3

Hello World! The counter is 4

Hello World! The counter is 5

Hello World! The counter is 6

Hello World! The counter is 7

Hello World! The counter is 8

Hello World! The counter is 9

18)

for (int row = 1; row < 11; row++)

{

for (char column = 'a'; column < 'k'; column++)

{

Console.WriteLine($"The cell is ({row}, {column})");

}

}

OUTPUT:

The cell is (1, a)The cell is (1, b)The cell is (1, c)The cell is (1, d)The cell is (1, e)The cell is (1, f)The cell is (1, g)The cell is (1, h)The cell is (1, i)The cell is (1, j)The cell is (2, a)The cell is (2, b)The cell is (2, c)The cell is (2, d)The cell is (2, e)The cell is (2, f)The cell is (2, g)The cell is (2, h)The cell is (2, i)The cell is (2, j)The cell is (3, a)The cell is (3, b)The cell is (3, c)The cell is (3, d)The cell is (3, e)The cell is (3, f)The cell is (3, g)The cell is (3, h)The cell is (3, i)The cell is (3, j)The cell is (4, a)The cell is (4, b)The cell is (4, c)The cell is (4, d)The cell is (4, e)The cell is (4, f)The cell is (4, g)The cell is (4, h)The cell is (4, i)The cell is (4, j)The cell is (5, a)The cell is (5, b)The cell is (5, c)The cell is (5, d)The cell is (5, e)The cell is (5, f)The cell is (5, g)The cell is (5, h)The cell is (5, i)The cell is (5, j)The cell is (6, a)The cell is (6, b)The cell is (6, c)The cell is (6, d)The cell is (6, e)The cell is (6, f)The cell is (6, g)The cell is (6, h)The cell is (6, i)The cell is (6, j)The cell is (7, a)The cell is (7, b)The cell is (7, c)The cell is (7, d)The cell is (7, e)The cell is (7, f)The cell is (7, g)The cell is (7, h)The cell is (7, i)The cell is (7, j)The cell is (8, a)The cell is (8, b)The cell is (8, c)The cell is (8, d)The cell is (8, e)The cell is (8, f)The cell is (8, g)The cell is (8, h)The cell is (8, i)The cell is (8, j)The cell is (9, a)The cell is (9, b)The cell is (9, c)The cell is (9, d)The cell is (9, e)The cell is (9, f)The cell is (9, g)The cell is (9, h)The cell is (9, i)The cell is (9, j)The cell is (10, a)The cell is (10, b)The cell is (10, c)The cell is (10, d)The cell is (10, e)The cell is (10, f)The cell is (10, g)The cell is (10, h)The cell is (10, i)The cell is (10, j)

19)

int sum = 0;

for (int number = 1; number < 21; number++)

{

if (number % 3 == 0)

{

sum = sum + number;

}

}

Console.WriteLine($"The sum is {sum}");

OUTPUT:

The sum is 63