**B8-221710308021**

**STEP 1:Intro**

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello World!");

}

}

}

STEP 2:Strings

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello Aniruddh!");

}

}

}

STEP3: Variables

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello Aniruddh!");

}

}

}

STEP 4: String Interpolation

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "Aniruddh";

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

}

}

}

STEP 5: Methods

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "Aniruddh";

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

}

}

}

STEP 6: Collections

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

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

foreach (var name in names)

{

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

}

}

}

}

C#

“NUMBERS IN C#”

int a=1;

int b=6;

int c=a+b;

Console.WriteLine(c);

int a=1;

int b=6;

int c=a+b;

Console.WriteLine(c);

int d=a-b;

int e=a\*b;

int f=a/b;

Console.WriteLine(d);

Console.WriteLine(e);

Console.WriteLine(f);

int a = 5;

int b = 4;

int c = 2;

int d = a + b \* c;

Console.WriteLine(d);

int a = 5;

int b = 4;

int c = 2;

int d = (a + b) \* c;

Console.WriteLine(d);

int a = 5;

int b = 4;

int c = 2;

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

Console.WriteLine(d);

int a = 7;

int b = 4;

int c = 3;

int d = (a + b) / c;

Console.WriteLine(d);

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 max = int.MaxValue;

int what = max + 3;

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

double a = 5;

double b = 4;

double c = 2;

double d = (a + b) / c;

Console.WriteLine(d);

Output

4.5

double a = 19;

double b = 23;

double c = 8;

double d = (a + b) / c;

Console.WriteLine(d);

Output 5.25

double max = double.MaxValue;

double min = double.MinValue;

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

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

double third = 1.0 / 3.0;

Console.WriteLine(third);

Output:0.33333333333333

decimal min = decimal.MinValue;

decimal max = decimal.MaxValue;

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

Output:The range of the decimal type is

-7922816251426 to 7922816251426337

double a = 1.0;

double b = 3.0;

Console.WriteLine(a / b);

decimal c = 1.0M;

decimal d = 3.0M;

Console.WriteLine(c / d);

0.333333333333333

0.3333333333333333333333333333

double radius = 2.50;

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

Console.WriteLine(area);

Output:19.6349540849362

BRANCHES AND LOOPS in C#

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

int a = 5;

int b = 3;

if (a + b > 10)

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

Output: No Output

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

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

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("And the first number is equal to the second");

}

else

{

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

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

}

Output:The answer is not greater than 10

Or the first number is not equal to the second

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 not greater than 10

Or the first number is equal to the second

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

int counter = 0;

do

{

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

counter++;

} while (counter < 10);

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

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

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

{

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

}

Output:The row is 1

The row is 2

The row is 3

The row is 4

The row is 5

The row is 6

The row is 7

The row is 8

The row is 9

The row is 10

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

{

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

}

Output:The column is a

The column is b

The column is c

The column is d

The column is e

The column is f

The column is g

The column is h

The column is i

The column is j

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)

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