IDE Lab 2/09/20

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello World!");

}

}

}

2.

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello User!");

}

}

}

3.

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

Console.WriteLine("Hello User!");

}

}

}

4.

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "User";

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

}

}

}

5.

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "User";

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

}

}

}

6.

using System;

using System.Collections.Generic;

using System.Linq;

namespace myApp

{

class Program

{

static void Main()

{

var name = "User";

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

}

}

}

7.Arithemetic Operations:

int a=10,b=20;

Console.WriteLine(a+b);

Console.WriteLine(a-b);

Console.WriteLine(a\*b);

Console.WriteLine(a/b);

O/P:

30

-10

200

0

8. //Explore order of operations

int a=10,b=20,c=3;

Console.WriteLine(a+b\*c);

Console.WriteLine(a-b+c);

Console.WriteLine(a/b\*c);

Console.WriteLine(a+b/c);

O/P:

70

-7

0

16

9. //Explore integer precision and limits

int a=10,b=20,c=3;

d=(a+b)/c;

e=(a+b)%c;

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

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

O/P: quotient:10

quotient:0

10. //Work with the double type

double a=10,b=20,c=3,d;

d=(a+b)/c;

Console.WriteLine(d);

O/P:

10

11. //Work with decimal types

double a = 1.0;

double b = 3.0;

Console.WriteLine(a / b);

decimal c = 1.0M;

decimal d = 3.0M;

Console.WriteLine(c / d);

O/P:

0.333333333333333

0.3333333333333333333333333333

12. //Complete challenge

double r=2.50;

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

Console.WriteLine(area);

O/P:

19.6349540849362

**LOOPS**

13. //Make decisions using the if statement

int a=10,b=9,c;

c=a+b;

if(c>10)

Console.WriteLine($"{c} Greater than 10");

else

{

Console.WriteLine($"{c} is less than 10");

}

O/P: 19 Greater than 10

14. //Make if and else work together

int a=0,b=9,c;

c=a+b;

if(c>10)

Console.WriteLine($"{c} Greater than 10");

else

{

Console.WriteLine($"{c} is less than 10");

}

O/P: 9 is less than 10

15. //Use loops to repeat operations

int a=1;

while(a<=10)

{

Console.WriteLine($" {a}");

a++;

}

O/P:

1

2

3

4

5

6

7

8

9

10

16. //Work with the for loop

int a;

for(a=1;a<=5;a++)

{

Console.WriteLine(a);

}

O/P: 1

2

3

4

5

17. //Created nested loops

int a,b;

for(a=1;a<=5;a++)

{

for(b=5;b>=1;b--)

{

Console.WriteLine($"{a},{b}");

break;

}

}

O/P:

1,5

2,5

3,5

4,5

5,5

18. //Combine branches and loops

int a;

for(a=1;a<=5;a++)

{

if(a%2==0)

{

Console.WriteLine($"{a} is even");

}

else{

Console.WriteLine($"{a} is odd");

}

}

O/P:

1 is odd

2 is even

3 is odd

4 is even

5 is odd

19. //Complete challenge

int sum = 0;

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

{

if (number % 3 == 0)

{

sum = sum + number;

}

}

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

O/P: The sum is 63