**Week 2**

**Program for if and else using “&&” operator**

Code:- 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

**Program using “||” operator**

Code:- 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 10

Or the first number is equal to the second

**Loops using “ while loops”**

Code: 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

**Program for “ do- while loop”**

Code:-

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

**Program using “for loop”**

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

{

Console.WriteLine($"Hi this is sathvik! The counter is {counter}");

}

Output:-

Hi this is sathvik! The counter is 0

Hi this is sathvik! The counter is 1

Hi this is sathvik! The counter is 2

Hi this is sathvik! The counter is 3

Hi this is sathvik! The counter is 4

Hi this is sathvik! The counter is 5

Hi this is sathvik! The counter is 6

Hi this is sathvik! The counter is 7

Hi this is sathvik! The counter is 8

Hi this is sathvik! The counter is 9

**Program for “nested loop” using “for loop”**

Program:- for (int row = 1; row < 11; row++)

{

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

{

Console.WriteLine($"The matrix value ({row}, {column})");

}

}

Output:-

The matrix value (1, a)

The matrix value (1, b)

The matrix value (1, c)

The matrix value (1, d)

The matrix value (1, e)

The matrix value (1, f)

The matrix value (1, g)

The matrix value (1, h)

The matrix value (1, i)

The matrix value (1, j)

The matrix value (2, a)

The matrix value (2, b)

The matrix value (2, c)

The matrix value (2, d)

The matrix value (2, e)

The matrix value (2, f)

The matrix value (2, g)

The matrix value (2, h)

The matrix value (2, i)

The matrix value (2, j)

The matrix value (3, a)

The matrix value (3, b)

The matrix value (3, c)

The matrix value (3, d)

The matrix value (3, e)

The matrix value (3, f)

The matrix value (3, g)

The matrix value (3, h)

The matrix value (3, i)

The matrix value (3, j)

The matrix value (4, a)

The matrix value (4, b)

The matrix value (4, c)

The matrix value (4, d)

The matrix value (4, e)

The matrix value (4, f)

The matrix value (4, g)

The matrix value (4, h)

The matrix value (4, i)

The matrix value (4, j)

The matrix value (5, a)

The matrix value (5, b)

The matrix value (5, c)

The matrix value (5, d)

The matrix value (5, e)

The matrix value (5, f)

The matrix value (5, g)

The matrix value (5, h)

The matrix value (5, i)

The matrix value (5, j)

The matrix value (6, a)

The matrix value (6, b)

The matrix value (6, c)

The matrix value (6, d)

The matrix value (6, e)

The matrix value (6, f)

The matrix value (6, g)

The matrix value (6, h)

The matrix value (6, i)

The matrix value (6, j)

The matrix value (7, a)

The matrix value (7, b)

The matrix value (7, c)

The matrix value (7, d)

The matrix value (7, e)

The matrix value (7, f)

The matrix value (7, g)

The matrix value (7, h)

The matrix value (7, i)

The matrix value (7, j)

The matrix value (8, a)

The matrix value (8, b)

The matrix value (8, c)

The matrix value (8, d)

The matrix value (8, e)

The matrix value (8, f)

The matrix value (8, g)

The matrix value (8, h)

The matrix value (8, i)

The matrix value (8, j)

The matrix value (9, a)

The matrix value (9, b)

The matrix value (9, c)

The matrix value (9, d)

The matrix value (9, e)

The matrix value (9, f)

The matrix value (9, g)

The matrix value (9, h)

The matrix value (9, i)

The matrix value (9, j)

The matrix value (10, a)

The matrix value (10, b)

The matrix value (10, c)

The matrix value (10, d)

The matrix value (10, e)

The matrix value (10, f)

The matrix value (10, g)

The matrix value (10, h)

The matrix value (10, i)

The matrix value (10, j)

**Challenge:-**

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