\*\* Exercise: Cast an int variable into a double variable

Step 1:

using static System.Console;

Step 2:

int a = 10;

double b = a; // an int can be stored in a double

WriteLine(b);

Step 3:

double c = 9.8;

int d = c; // compiler gives an error for this line

WriteLine(d);

\*\* Exercise: Cast a double variable into an int variable

Step 2:

int d = (int)c;

Step 4:

long e = 10;

int f = (int)e;

WriteLine($"e is {e} and f is {f}");

e = long.MaxValue;

f = (int)e;

WriteLine($"e is {e} and f is {f}");

\*\* Exercise: Use the System.Convert type for conversions

Step 1

using static System.Convert;

Step 2

double g = 9.8;

int h = ToInt32(g);

WriteLine($"g is {g} and h is {h}");

\*\* Exercise: Check how numbers are rounded in C#

Step 1

Double i = 9.49;

double j = 9.5;

double k = 10.49;

double l = 10.5;

WriteLine($"i is {i}, ToInt(i) is {ToInt32(i)}");

WriteLine($"j is {j}, ToInt(j) is {ToInt32(j)}");

WriteLine($"k is {k}, ToInt(k) is {ToInt32(k)}");

WriteLine($"l is {l}, ToInt(l) is {ToInt32(l)}");

\*\* Exercise: Convert to the string type

Step 1:

int number = 12;

WriteLine(number.ToString());

bool boolean = true;

WriteLine(boolean.ToString());

DateTime now = DateTime.Now;

WriteLine(now.ToString());

object me = new object();

WriteLine(me.ToString());

\*\* Exercise: Parse to numbers or dates and times

Step 1:

int age = int.Parse("27");

DateTime birthday = DateTime.Parse("4 July 1980");

WriteLine($"I was born {age} years ago.");

WriteLine($"My birthday is {birthday}.");

WriteLine($"My birthday is {birthday:D}.");

Step 3:

int count = int.Parse("abc");

Step 5:

Write("How many eggs are there? ");

int count;

string input = Console.ReadLine();

if (int.TryParse(input, out count))

{

WriteLine($"There are {count} eggs.");

}

else

{

WriteLine("I could not parse the input.");

}

\*\* Activity- C1

Step 1:

//Nullable operators

string str1 = null;

string str2 = str1 ?? "No value"; // str2 is now "No value"

Console.WriteLine(str2);

Step 3:

//Null conditional

string str3 = null;

int? length = str3?.ToString().Length;

Console.WriteLine(length);

Step 5:

//This generates 0, since str3 is null

int length2 = str3?.ToString().Length ?? 0;

Console.WriteLine(length2);