# Data Conversion Lab

# Lab 1: Integer to Decimal (Implicit)

Replace the entire contents of the **Program.cs** file with the following code.

```csharp
int qty = 10;
decimal result;

result = qty;

Console.WriteLine(result);
```

## Try It Out

Run the application and view the output.

# Lab 2: Decimal to Integer (Explicit)

Replace the entire contents of the **Program.cs** file with the following code.

```csharp
decimal price = 5.99M;
int result;

// The following DOES NOT work
result = price;
```

Show the compiler error. You need to use the Convert.ToInt32() method as shown in the following code. Replace the entire contents of the **Program.cs** file with the following code.

```
decimal price = 5.99M;
int result;

// Rounds to the nearest whole number
result = Convert.ToInt32(price);
Console.WriteLine(result);

// Truncates the decimal portion
result = (int)price;
Console.WriteLine(result);
```

## Try It Out

Run the application and view the output.

# Lab 3: Decimal to Float (Explicit)

Replace the entire contents of the **Program.cs** file with the following code.

NOTE: There is NO Convert.ToFloat() method

```
decimal value = 51234235.9283438742M;
float result;

result = (float)value;
Console.WriteLine(result);
```

## Try It Out

Run the application and view the output.

# Lab 4: String to Number

## String to Integer

Replace the entire contents of the **Program.cs** file with the following code.

```
string qty = "10";
int result;

result = Convert.ToInt32(qty);
Console.WriteLine(qty);

// The following DOES NOT work
//result = (int)qty;
```

## Try It Out

Run the application and view the output.

## String to Integer using TryParse

Replace the entire contents of the **Program.cs** file with the following code.

```
string qty = "10";
int result;

if(int.TryParse(qty, out result)) {
  Console.WriteLine(result);
}
else {
  Console.WriteLine("Not a Valid Integer");
}
```

## Try It Out

Run the application and view the output.

# Lab 5: String to DateTime

## String to DateTime

Replace the entire contents of the **Program.cs** file with the following code.

```
string dt = "1/1/2022";
DateTime result;

result = Convert.ToDateTime(dt);
Console.WriteLine(result);
```

## Try It Out

Run the application and view the output.

## String to DateTime using TryParse

Replace the entire contents of the **Program.cs** file with the following code.

```
string dt = "1/1/2022";
DateTime result;

if (DateTime.TryParse(dt, out result)) {
  Console.WriteLine(result);
}
else {
  Console.WriteLine("Not a Valid Date/Time");
}
```

## Try It Out

Run the application and view the output.

# Lab 6: Number to String

## Decimal to String

Replace the entire contents of the **Program.cs** file with the following code.

```
decimal price = 5.99M;
string result;

result = price.ToString();
Console.WriteLine(result);

result = price.ToString("c");
Console.WriteLine(result);

result = Convert.ToString(price);
Console.WriteLine(result);
```

## Try It Out

Run the application and view the output.