

**Note:** This lab has **two different zip files**. Each contains a different C# solution. Use the Debug Exercise solution for Tests 1 and 2. Use the Lab 2 solution for Tests 3-10.

**Note:** Prior to attempting to open the program, **you must first 'extract' the zip file**. Visual Studio will not correctly access a project that is in a zip file. You must use the extracted file/project to work on the project in Visual Studio

### Test 1 – Debug a program

Open the Debug Exercise program (double click on the Debug Exercise.sln file). Correct all syntax errors (there should only be 5 – simple errors – will not require new code – just correcting minor/typographical errors) in the Program.cs file so that it will run correctly. Do not remove any of the breakpoints. If they are inadvertently removed, they should be on lines 28, 30 and 60 (unless the program is re-formatted in the process of correcting syntax errors).

### Test 2 – Use the Visual Studio Debugger

**Open the Debug Questions document** in the Debug Exercise project folder and answer the questions as the program executes. When you submit the Debug Exercise zip file ensure you include the Debug Questions document that includes you answers.

**NOTE:** For Tests 3-10, you are required to use the appropriate Parse method for each conversion. **The Convert class is not allowed in PG1 (for any assignment)**. No credit will be given for calls using the Convert class (i.e. Convert.ToInt32). The appropriate classes are listed in each Test's instruction (for Test3, it specifies to use the Int32 class – so Int32.Parse(input);

Beginning with Lab 2 – you will use the Submission class (Submission.cs) to respond to the questions/instructions for all Labs (do not edit any existing code in any other Lab files unless specifically told to). This does not preclude you from creating additional .cs files and classes.

### Test 3 – Convert a string to int

```
static int Test3(string input)
```

Given a string, using the **Int32** class, convert the string to an integer. Return the integer

### Test 4 – Convert a string to sbyte

```
static sbyte Test4(string input)
```

Given a string, using the **SByte** class, convert the string to a signed byte. Return the signed byte

### Test 5 – Convert a string to double

```
static double Test5(string input)
```

Given a string, using the **Double** class, convert the string to a double. Return the double

### Test 6 – Convert a string to ushort

```
static ushort Test6(string input)
```

Given a string, using the **UInt16** class, convert the string to an unsigned short. Return the unsigned short

### Test 7 – Convert a string to float

`static float Test7(string input)`

Given a string, using the `Single` class, convert the string to a float. Return the float

### Test 8 – Convert a string to uint

`static uint Test8(string input)`

Given a string, using the `UInt32` class, convert the string to an unsigned integer. Return the unsigned integer

### Test 9 – Convert a string to short

`static short Test9(string input)`

Given a string, using the `Int16` class, convert the string to a short. Return the short

### Test 10 – Convert a string to ulong

`static ulong Test10(string input)`

Given a string, using the `UInt64` class, convert the string to an unsigned long. Return the unsigned long