C# Data Types

A complete detail of C# data types are mentioned below:

Value Types:

Data Types	Size	Values
sbyte	8 bit	-128 to 127
byte	8 bit	0 to 255
short	16 bit	-32,768 to 32,767
ushort	16 bit	0 to 65,535
int	32 bit	-2,147,483,648 to 2,147,483,647
uint	32 bit	0 to 4,294,967,295
long	64 bit	-9,223,372,036,854,775,808 to 9,223,372,036,854,775,807
ulong	64 bit	0 to 18,446,744,073,709,551,615
char	16 bit	0 to 65535
float	32 bit	-1.5 x 1045 to 3.4 x 1038
double	64 bit	-5 x 10324 to 1.7 x 10308
decimal	128 bit	-1028 to 7.9 x 1028
bool	---	True or false

Reference Types:

Data Types	Size	Values
string	Variable length	0-2 billion Unicode characters
object	---	---

```
num1 = Int32.Parse(Console.ReadLine());

Integer = int32.parse() or Convert.ToInt32()
Float= (float)
Double=Convert.ToDouble()
Decimal=Convert.ToDecimal()
Byte=Convert.ToByte()
```

Lab2.4 – Exercise on variables and datatypes

Objective

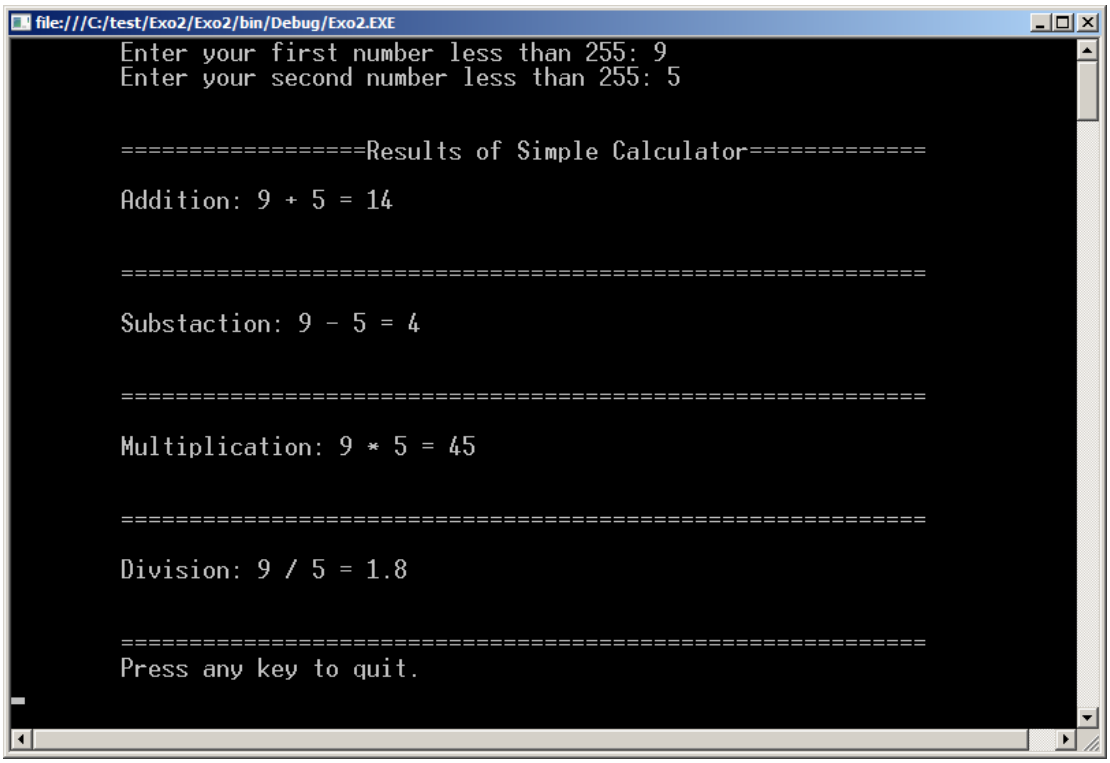
You will do some programming exercises of variables and data types in C#. It will help you to improve your programming skills in using **variables and data types in C#**.

Q2: Write a program to display results of the basic arithmetical operation. Accept 2 numerical entries, and store all the values in the appropriate variable data types and then calculate and print all the information of the 4 operations (add, sub mul, and div) in correct format on console.

Use the conversion for the 2 entries as **long** data type and for the result as **decimal** data type. Add the try & catch to all your conversions from string to numerical datatypes.

Have the similar output like in the **Lab 2.2**, use placeholders of 20 characters' length, align all the entered numbers to the left and the results to the right.

Output:



Identify yourself and the work in each .cs file.

Send your. cs file(s) by LEA of Omnivox

Thank you