Week 3 Lecture Notes

Programming Jargon/Terminology

Reserved word – A word used in a programming language that has a specific meaning

Variable (Identifier) – A named space in memory that contain data in use by a program

Library – A grouping of functions that a programming can include in a program if desired.

Variables

Proper selection of type is important

Memory Allocation – Each type takes up a basic amount of memory space

Numeric types

Int

Float

Double

Signed vs Unsigned

Variable Naming Conventions (Identifier)

Snake case (variable\_one\_

Camel Case (variableOne)

Pascalcase (VariableOne)

Identifiers should –

1. Tell you what data is held in the variable
2. Conventions should be consistent
3. Indicate the Type of variable

Basic Arithmetic

Mathematical Order of Operations (precedence rule)

Compound Operator

+=

-+

\*=

/=

X = x+5 is the same as x +=5

Outputting variables

Use Variable name

Setprecision() used to set decimal precision of floating point (float) numbers – iomap library

Count << “Round to 100th place” << setprecision(3) << 3.12345 << endl;

Math functions

Math header file <cmath>

<https://www.cplusplus.com/reference/cmath/>

Integer Division

Modulo (remainder)

Type Casting

Changing a variables type temporarily

Static\_cast< type >(variable name)