BTP100 Lesson Outline: Week 2

A. Revision of Previous Week (Compiler, gcc vs Ms C compiler, platform dependency, Computer structure, ALU, Memory, CU)

B Concepts (slides and hands on)

1. data types and variables
2. Memory Allocation (static/compile time and dynamic /run time)

2. computation

a) a sequence of executable statements

b) arithmetic operators

c) assignment operator

d) scanf

e) printf

3. integer division (vs floating-point division)

4. truncation (narrowing)

5. explicit type conversion (casting)

6. boolean expressions (relational and logical)

7. shorthand expressions (unary and binary operators)

B. Additional Code Examples (zip file on Blackboard)

secondC.c, integer\_div.c, cast\_integer.c, cast\_double.c, boolean\_expressions.c, shorthands.c

(testing data: 124, 4, $3.45)

C. Video Recording of the Lecture

D. Course Notes

<https://ict.senecacollege.ca/~btp100/pages/content/varia.html>

<https://ict.senecacollege.ca/~btp100/pages/content/input.html>

<https://ict.senecacollege.ca/~btp100/pages/content/expre.html>

**E. Practice Problems (Blackboard)**

**- with links to video clips**