

Critical Thinking Week 3

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CSC450 Programming III

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2/2/2025

Pseudocode:

START Program

// Declare integer variables

DECLARE length, width, height AS INTEGER

// Declare pointers to dynamically allocate memory

DECLARE length_ptr, width_ptr, height_ptr AS POINTER TO INTEGER

SET length_ptr TO NEW INTEGER

SET width_ptr TO NEW INTEGER

SET height_ptr TO NEW INTEGER

// Read input values and store them in dynamic memory

DISPLAY "Enter Length: "

READ *length_ptr

SET length TO *length_ptr

DISPLAY "Enter Width: "

READ *width_ptr

SET width TO *width_ptr

DISPLAY "Enter Height: "

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READ *height_ptr
SET height TO *height_ptr

// Display stored values and memory addresses
DISPLAY "Variables and dynamically allocated memory:"
DISPLAY "Length:", *length_ptr, " stored at address:", length_ptr
DISPLAY "Width:", *width_ptr, " stored at address:", width_ptr
DISPLAY "Height:", *height_ptr, " stored at address:", height_ptr

// Free dynamically allocated memory
DELETE length_ptr
DELETE width_ptr
DELETE height_ptr

END Program
```