COSC2100

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January 23, 2025

*ICE 2 Report*

Here is a screenshot of my running Windows Forms App, before any input has been provide by the user or any interaction has happened with the window:

A screenshot of a computer

Description automatically generated

(cont.)

Here is a screenshot of the age result generated by clicking “Show Results”:

A screenshot of a baby's face

Description automatically generated

And here is a final screenshot for a different set of results, in a different generation:

A screenshot of a computer

Description automatically generated

**Questions:**

**Question 1:** When can we **omit** the braces {} after an if-else statement?

**Answer:** We can omit the braces after an if-else statement if the execution for the block is a single statement. i.e. ‘if’ or ‘else’ is followed by a single statement or line of code.

**Question 2:** What is the **difference** between using if-else and switch-case?

**Answer:** A switch case is used for multiple **discrete execution paths** based **one variable**. An if-else block can compare **multiple variables** and create more **complex/branching control paths**

**Question 3:** What is the **difference** between using a while and a do-while?

**Answer:** A while loop **will** **execute (and keep executing) only when** the condition is **True**. A do-while loop **always** **executes once** and continues executing while the condition is **True**.

**Question 4:** What is the **difference** between using a for and a foreach?

**Answer:** A for loop loops **a given number** of times as set by the programmer. A foreach loop loops over **elements of a collection**, dynamically adjusting the loop count based on collection size.