

# Assignment 5

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**Student Name:**

**Grader Name:**

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**Reading Assignment:** C++ Primer, 5th edition

- Chapter 5 – Statements

**True or False:**

1. **0.5 pt** – In a `switch` statement, it is illegal to jump from a place where a variable with an initializer is out of scope to a place where that variable is in scope.
2. **0.5 pt** – Variables defined in a `while` condition or `while` body are created and destroyed on each iteration.

**Short Questions:**

1. **1 pt** – When is a compound statement useful?
2. **1 pt** – Describe the execution of the `while` statement.
3. **1 pt** – List four jump statements offered present in C++.
4. **1 pt** – What are exceptions?
5. **1 pt** – For the exception types that require a string initializer, what is returned by the `what` member function?

**Programming Challenge:**

1. Write a program that reads two integers from the standard input and prints the results of dividing the first number by the second one. The program should throw an exception if the second number is zero. Use a `try` block to `catch` the exception. The `catch` clause should print a message to the user and ask them to supply new numbers.
2. Implement your application in C++.
3. Using CMake and GitHub, commit your code as a project in a directory labeled `Cpp` and under project name `Code5`.