CPSC8700 Activity
Today we will experiment with several things.

1. Login into Linux and open an editor of your choice. Both pico and vi come preinstalled, so it is up to you which one to use. Make sure you know the controls – how to save and exit, etc.

2. Now we will explore C++ multiple inheritance. Multiple inheritance is when a class inherits from more than one base class. Do online search and look at some examples, so you know what the proper syntax is. Then download files Car.h, Car.cpp and CarDriver.cpp from Canvas. Compile and run them to familiarize yourself with the process.

3. Now create a class Vehicle that has one protected member – fueltype. You only need default constructor, a parameterized constructor, a destructor, a getter and a setter. You can inline all the functions, and you do not need any overloaded operators for this exercise. Name your file Vehicle.h. Do not forget the include guards.

4. Now add a derived class called MiniCooper that has one member: string color. You need to add a default constructor, a parameterized constructor, a destructor, and getters and setters. You do not need any overloaded operators or static members/functions for this exercise. You can inline all the functions in the MiniCooper.h file. Remember the include guards.

5. In your main program (CarDriver.cpp) remove all the existing contents and create a MiniCooper * *mini* using a *new* operator, and print all its members: year, speed, make, color and fueltype.

6. As the last part of this exercise, add overloaded operator << so you can output all members of the MiniCooper object. Demonstrate that it works.

7. Submit your code to Canvas to Inheritance Activity link before deadline.

Formatting:
Place left curly brace at the end of the previous line, not use to waste a line for a brace. Indent the body 3-4 spaces, do not use tab. Lines should be no longer than 80 chars.

Debugging:
Type only several lines at a time and compile. Do this often. If at some point the code does not compile, you know it is the last few lines that you have added.