**Lesson 8 – Threads**

* All programs operate sequentially (line by line)
  + Not very efficient
* **Thread** = Separate flow of control
  + Sequence of statements that run on their own
    - Examples:
      * Main Method = separate thread
      * Printing a piece of paper = separate thread
  + When 1 or more thread exists the computer much switch between them
    - Statements within each thread are still executed in order
    - Statements from other threads may execute between any 2 statements from the same thread
    - Execution is fast enough that it appears all steps are being executed simultaneously
  + To use a thread, you must do the following
    - A constructor for the thread object
      * Object that needs to be run past as a parameter
        + Making a new thread to run the object
        + Use the start() method to invoke the thread

This invokes the run() method

The current class must have a run method

* + - A command to start the thread
  + To make a run() method you must use an **interface**
    - **Interface** = list of all methods that will be provided to a class that implements it
      * Only state the method signature in the body
* **Side Effects of Threads**
  + Interactions between the threads are very limited
  + Change in program state between commands in a particular thread
    - If the state changes in 1 point in time the program may crash