

# Task One

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## 1 Module Learning Outcomes Met by this Exercise:

- 2. Apply Concurrency to common tasks

## 2 Preamble

- This first task is to give you some practice setting up and using concurrency in your programs.

## 3 Part One

- We start with just thread creation in this first exercise. The sample code provided has one code that takes a string parameter, download it from here: Concurrency Base Code
- Write a simple function that takes an int and prints it to screen, then launch two threads using it, passing a different number to each thread.
- The result should be a program with two threads, each of which prints a different number to the screen.

## 4 Part Two

- use **wget** to fetch this file [http://www.politespider.com/370ct/caged\\_bird.txt](http://www.politespider.com/370ct/caged_bird.txt)
- Alter your program so that it loads the file contents (Caged Bird by Maya Angelou) and stores **each line** in an array.
- Write function that will print the output line by line, with a delay of *1* seconds between each line printing.

- Instead of the more usual iterator approach, and use an integer variable named pos to fetch the array element to display.
- One thread should increment the number that determines what line that gets printed next. The other thread should display the line.
- How many times the same line is displayed is unimportant, this is only a simple program. We will also not bother to protect this shared variable yet. This may or may not cause problems, since this is such a simple program.