**Manual parallelization of a Sequential program**

CAB401 Semester 2 Assignment

By Ian Daniel – n5372828

**The Sequential Program**

The program searches for Sigma70 in E. coli genes. Sigma 70 is a housekeeping sigma factor also known as the primary sigma factor. It keeps essential genes and pathways operating. The search uses the Smith-Waterman algorithm, this algorithm performs the sequence alignment.

The general structure of the