CDA 3103 – Project 1 (Assembly Language)

Programming Assignment: [Due 6/15]

Work in group of two people (maximum) and submit only one assignment per group. Use the SPIM simulator for coding the assignment [http://pages.cs.wisc.edu/~larus/spim.html]

Problem A.9 [page A-82]

Write and test a MIPS assembly language program to compute and print the first 100 prime numbers. A number 'n' is prime if no numbers except 1 and 'n' divide it evenly. You should implement two routines:

- test_prime (n) - Return 1 if n is prime and 0 if n is not prime.
- main () - Iterate over the integers, testing if each is prime. Print the first 100 numbers that are prime.

Test your programs by running them on SPIM.

Grading Guidelines

For your information here are the grading guidelines for the SPIM component of the assignment. Submit the code files in .asm (or .s) extension before deadline

- Program compiles without errors (and appears to address the problem) : 50pts
- Program executes correctly: (additional) 40 points
- Documentation and description of the program: 10 points

For the comments try to comments it generally for someone who is not aware of the assignment can understand what the program is computing