

CS 320 – Spring 2009

Assignment 05 – Due: Monday, March 23

Write an assembly program to do the following:

Pg 194 - WGC

Create a procedure called FuncNumTbl, used to display the truth table (it doesn't need the part where you would show your work) for a given binary function specified by its function number:

Inputs: EDX holds an unsigned integer indicating the function number

Display: Print out a truth table for the given function

Outputs: None, however you should restore all non-output registers

Pg 200 - WGC

Create a procedure called FuncNumCanonical, used to display the sum of minterms canonical form of a given binary function specified by its function number:

Inputs: EDX hold an unsigned integer indicating the function number

Display: Print out the given function in sum of minterms canonical form.

Outputs: None, however you should restore all non-output registers

Pg 222 - ALFIBC

Create an efficient procedure called IsPrime, used to determine if a given number is prime or not:

Inputs: EAX holds the number to test

Display: None

Outputs: ZF is 1 if EAX was prime, 0 otherwise. You should restore all non-output registers

Include test code to check your results. Make sure that your code has the upper comment block filled out such that your name & the assignment number are listed and comment your procedures. Additional comments may be included at your discretion.

Put a copy of your source code file (.asm) into a **.zip** file named

**CS320-A03-YOURNAME.zip**. Note: if you have trouble creating zip files in the labs, refer to my tutorial on my Fall 2008 CS104 course page.