COSC2406 Lab 6 – Procedures, Part 1

Coding: submit all asm files to the LMS.
In-Lab Tutorial: The Irvine32 Procedures and Using the Irvine32 Help Documentation

The ShowAllColors Procedure. Create a procedure to show all of the text color combinations. Use EAX for this. Choose a message to print (it can be anything: your name, your favourite food, etc.) *You do not need to input the string from the user at this point.* Set ECX to 256, and EAX to zero. Preserve all General-Purpose registers and the flags. Loop on the following:

(a) Set the text color (using SetTextColor)
(b) Print your message
(c) Increment EAX (using INC) ADD EAX, 1
(d) Exchange EAX and EBX, or push EAX to the stack
(e) Set the text color to black (set EAX = 0 and CALL SetTextColor)
(f) Carriage Return, Line Feed (using CrLf)
(g) Delay for 50 msec (0.05 seconds, using Delay)
(h) Exchange EAX and EBX again, or pop EAX from the stack
(i) Loop

At the end of your function before returning, set the colour to grey text on black (value 07h). A snip of the output of this question is below. Be sure to push and pop EAX, EBX, ECX and the flags to preserve their values! Your procedure should assume that the string offset is in the EDX register before it begins. This procedure should display output like this:

Randomness! Create a procedure to generate a signed random number between a user supplied range. Collect the high value for the range first, then the low value. Call Randomize and then call RandomRange with the two values appropriately. Add the low value and display the result as a signed integer, with an appropriate message.

You can use the same file for the questions, just separate the outputs.