CS 2614 Project Design

**Converting input to decimal:**

Due to low level of assembly, we must convert the HEX to BINARY first.

Then we can convert to decimal.

Or….

Divide first digit by 10. Modulo second digit by 10.

For Division:

Have two variables X, HEX 00 and Y, HEX 0A. X stores the dividend and Y stores the divisor (10). Have variable P, DEC 0 which stores the product of division.

Have a function for each symbol of HEX to convert to decimal.

In each function, have a counter increment for HEX variable.

For Modulo:

Same as division, but store the remainder in variable R, DEC 0.

Finally, must add the two bits together. P will store the most significant bit

**Check for the largest digit:**

Loop through the decimal digits using loop conditions. After checking each digit, use shift to go to the next digit.

**Loop conditions:**

Initialize constant decimal “NBR” to the length of the digit multiplied by negative one.

Initialize constant hex “CTR” to zero

Store “NBR” in “CTR”

Clear AC

Define method LOP, that carries out the operation

Increment “CTR”

Call “BUN LOP” to repeat the loop