LAB EXPERIMENT #3

Objective(s) ▪ Become familiar with using memory copy, procedures, and arithmetic operations in 8086 emulator software.

Lab Work Write an assembly program that can multiply two 32-bit numbers.

1. First**,** store two 32-bit numbers in memory. Assume that your numbers are 11223344h and 55667788h. Your numbers in memory should look like this:

Address	Value	
2000h	44h	
2001h	33h	Number 1
2002h	22h	
2003h	11h	
2004h	88h	
2005h	77h	Number 2
2006h	66h	
2007h	55h	

2. Then, read the numbers to multiply and store the result in memory. The product in memory should look like the following:

Address	Value	
2008h	20h	
2009h	D8h	
2010h	17h	
2011h	01h	
2012h	A6h	RESULT
2013h	36h	
2014h	B7h	
2015h	05h	

P.S.: Given numbers, result and memory representations are illustrative. Your work may vary.

Evaluation: You must complete your work until lab hour.