

Assembly Language Programming: Laboratory Test (Group-C)

Wichit Sirichote, Department of Applied Physics, KMITL, 10-13 October 2547

1. Write a program that copy contents of internal registers, R0-R7 to the on-chip memory at location 50H-57H. Try with two methods, i.e. 1st method with simple direct addressing mode and the 2nd method with indirect addressing mode.
2. Write a program that copy internal memory from address 00-7FH to external data memory at 9000H-907FH.
3. Use the utility routines in monitor program to print “Hello worlds” 100 times with counting number from 0-100, e.g.,

Hello Worlds 0
Hello Worlds 1
Hello Worlds 2
.....

4. Show the result of addition between two 16-bit numbers in hexadecimal. Suppose number1 and number2 are stored in external data memory.

Number1: DS 2
Number2: DS 2

5. Add two BCD numbers and print result on screen.
6. Get ASCII code from terminal, print a given text for each key that pressed. For example,

Key ‘1’ prints “Sawasdee Thailand”
Key ‘2’ prints “I think I’m ok”
Key ‘3’ prints “Good luck”
