Name: Id#

COE 205, Term 092

Computer Organization & Assembly Programming

Quiz# 6

Date: Monday, May 17, 2010

# 

# **Q1.** Compare macros and procedures in terms of parameter passing, types of parameters, invocation mechanism, memory space, execution time and assembly time.

# **Q2.** Give an example where it is better to use macros than procedures.

# **Q3.** Given the following macros and macro invocations, determine the assembly code generated by the assembler:

1. GET\_BIG FIRST, SECOND

|  |
| --- |
| GET\_BIG MACRO WORD1, WORD2 |
| LOCAL EXIT |
| MOV EAX, WORD1 |
| CMP EAX, WORD2 |
| JG EXIT |
| MOV EAX, WORD2 |
| EXIT: |
| ENDM |

1. A LABEL DWORD

BLOCK 5

|  |  |
| --- | --- |
| BLOCK MACRO N |  |
| K=1 |  |
| REPT N |  |
| DWORD K |  |
| K=2\*K+1 |  |
| ENDM |  |
| ENDM |  |

1. SAVE\_REGS < EAX, EBX, ECX>

|  |
| --- |
| SAVE\_REGS MACRO REGS |
| IRP D, <REGS> |
| PUSH D |
| ENDM |
| ENDM |