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  |