Quiz 5
CSE 30
Spring 2002

Use these words (and possibly a combination of these words) to answer #1. May be used more than once.

global  local  static  extern  internal
external  parameter  initialized  uninitialized  default
executable  preprocessor  assembler  linker  loader
compiler  lint  purify  debugger  editor
entire src module  Data  entire function  dynamic  entire program
BSS  Heap  Stack  volatile  register
Write-Back  Write-Through  function call  buffer cache  disk

#1. An initialized local variable has local scope/visibility to the __________________________ in
which it is defined and is stored in the ______________ and therefore the lifetime/duration of this variable
is the lifetime of the __________________________.

An initialized global variable has scope/visibility to the __________________________ in
which it is defined and is stored in the _____________ segment and therefore the lifetime/duration of this variable
is the lifetime of the __________________________.

________________ cache data is only written to main memory when it is forced out of the cache.

When a function is declared to be static, it’s scope/visibility is __________________________.

The keyword to turn off optimizations that may be applied to a variable is __________________________.

_______________ linking makes it easier to update compiled programs with newer versions of libraries?

#2. Put the following in the correct order/sequence of flow:

A) execution  B) source code
C) loader  D) assembler
E) compiler  F) executable
G) linker  H) preprocessor

______→______→______→______→______→______→______→______→______

(over)
#3. List 2 ways/events which would cause a partial context switch to occur (the entire process is not switched out of the CPU but its execution is temporarily suspended because of these events).

#4. Order by general speed the following data storage types. [ 1 is fastest, 6 is slowest ]

L1 cache ______

registers _____

SASD _____ (Sequential Access Storage Device -- e.g., tape drive)

L2 cache _____

DASD _____ (Dynamic Access Storage Device -- e.g., disk drive)

RAM _____ (Random Access Memory -- e.g., main memory)

What question would you most like to see on the Final Exam?