Quiz 5  
CSE 30  
Fall 2001

Use these words (and possibly a combination of these words) to answer #1.

<table>
<thead>
<tr>
<th>global</th>
<th>local</th>
<th>static</th>
<th>extern</th>
<th>internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>external</td>
<td>parameter</td>
<td>initialized</td>
<td>uninitialized</td>
<td>default</td>
</tr>
<tr>
<td>executable</td>
<td>preprocessor</td>
<td>assembler</td>
<td>linker</td>
<td>loader</td>
</tr>
<tr>
<td>compiler</td>
<td>lint</td>
<td>purify</td>
<td>debugger</td>
<td>editor</td>
</tr>
<tr>
<td>entire source module</td>
<td>entire function</td>
<td>entire function</td>
<td>entire program</td>
<td></td>
</tr>
</tbody>
</table>

#1. Which type of variable has local scope/visibility to the **function** in which it is defined but is stored in the Data segment and therefore the lifetime/duration of this variable is the entire lifetime of the program.

__________________________

Which type of variable has local scope/visibility to the **entire source module** in which it is defined but is stored in the BSS segment and therefore the lifetime/duration of this variable is the entire lifetime of the program.

__________________________

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

#2. A TLB (Translation Lookaside Buffer) caches recent ________________ to ________________ address translations/mappings.

The ________________ is responsible for performing the above address translations/mappings.

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

L2 cache _____

registers _____

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

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

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

L1 cache _____

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