

Quiz 5 - X86-64 assembly (recursion)

Duration: 10 minutes

open notes, please show your work

Name:.....

ID#:.....

Question: Given the following partial C code of a *nested recursion* and complete assembly code, fill in the blanks of the C code.

<pre>int fun(int n) { if (n > _____) return _____; return fun(fun(fun(_____))); } int main() { int r; r = fun(_____); return 0; }</pre>	<pre>fun: cmpl \$100, %edi jle .L2 leal -10(%rdi), %eax ret .L2: subq \$8, %rsp addl \$13, %edi call fun movl %eax, %edi call fun movl %eax, %edi call fun addq \$8, %rsp ret main: subq \$8, %rsp movl \$5, %edi call fun movl \$0, %eax addq \$8, %rsp ret</pre>
---	---