

# Memory management homework

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- Write a module that is called mtest
- When module loaded, module will create a proc fs entry /proc/mtest
- /proc/mtest will accept 3 kind of input
  - **"listvma" will print all vma of current process in the format of start-addr end-addr permission**  
e.g  
0x10000 0x20000 rwx  
0x30000 0x40000 r—
  - **"findpage addr" will find va->pa translation of address in current process's mm context and print it. If there is not va->pa translation, print "translation not found"**
  - **"writeval addr val" will change an unsigned long size content in current process's virtual address into val. Note module should write to identity mapping address of addr and verify it from userspace address addr.**
- All the print can be done with printk and check result with dmesg.