CMPE 283

Virtualization

Assignment 1: Discovering VMX Features

Question 2: Steps to follow

1. Download and install VMware Workstation Player
2. Download Ubuntu 17 .iso file and install Ubuntu in VMware Workstation Player
3. Install git using following commands
   1. sudo apt-get update
   2. sudo apt-get upgrade
   3. sudo apt --fix-broken install ( I had to run this command to fix problem which was occurring during installation of git)
   4. sudo apt-get install git
4. Clone linux kernel tree from github using following command
   1. git clone <https://github.com/torvalds/linux.git>
5. Change directory to linux
   1. cd linux
6. Enter following command to see git all commit and save latest git commit id
   1. git log
   2. commit id: d81fa669e3de7eb8a631d7d95dac5fbcb2bf9d4e
7. When trying to run ‘make menuconfig’ error occurred: ncurses not found
   1. To solve error install ncurses library using following command
      1. sudo apt-get install libncurses-dev
8. Run command ‘make menuconfig’
9. When trying to run ‘make && make modules && make modules\_install && make install’ error occurred: opensslv.h not found
   1. To solve error install openssl library using following command
      1. sudo apt-get update && sudo apt-get install libssl-dev
   2. After resolving problem run following commands as superuser
      1. sudo make
      2. sudo make modules
      3. sudo make modules\_install
      4. sudo make install
10. Create a new directory cmpe283 in linux directory and go into that directory
    1. mkdir cmpe283
    2. cd cmpe283
11. Create makefile and cmpe283-1.c and run following command
    1. Make
12. Insert kernel module into kernel using following command
    1. Sudo insmod ./cmpe283-1.ko
    2. dmesg