Ans 1. Did the assignment alone

Ans 2. Performed following steps to complete the assignment

1. Install VM Workstation 15 pro and start a VM with linux distro Ubuntu 18.04 LTS
2. Fork main linux source code from github.

<https://github.com/torvalds/linux>

1. Checkout the source to local machine

git clone <https://github.com/sshekhar93/linux.git>

1. Install all the dependencies for building linux kernel.

sudo bash apt-get install build-essential kernel-package fakeroot libncurses5-dev libssl-dev ccache bison flex libelf-dev

1. [OPTIONAL] Build the kernel and install the new kernel

make menuconfig make && make modules && make install && make modules\_install

1. Download the starter code provided on canvas
2. Look up all the needed MSRs alias and code
3. Look up the bit values of all the MSRs
4. Write the program to display all the needed MSRs in the provided starter code
5. Create a directory in the linux source code for the assignment module

mkdir cmpe283/assignment1

1. Copy both c file and Makefile to the above directory

cp cmpe283-1.c Makefile linux/cmpe283/assignment1/

1. Build the code

make

1. After that insert the kernel module that is the file with extension .ko

insmod cmpe283-1.ko

1. Check if the module is inserted

lsmod

1. Check