1) Show directory contents: ls
2) ls -la for long listing and hidden files
3) The first ten characters imply the permissions for that distinct file (read/write/execute)
4) Access file system in human readable format: df -h
5) /bin 5 programs:
    1) Sync - writes any data buffered in memory out to disk.
    2) Gzip - compresses files. Each single file is compressed into a single file. The compressed file consists of a GNU zip header and deflated data
    3) Lesskey - lesskey is used to specify a set of key bindings to be used by less.
    4) Touch - Used to update the access ate and or modify date of a file or directory. It is also a shortcut for creating and saving a new file without ever opening the file.
    5) Red - red is a restricted ed, it can only edit files in the current directory and cannot execute shell commands.
6) All the following are the terminal commands specified for this question:
    - Mkdir ASEN4057
    - Touch asen4057test.txt
    - Edit asen4057test.txt
    - Chmod 774 asen4057test.txt
    - Ls -la
    - Cat asen4057test.txt
    - Mv asen4057test.txt /home/folg
    - Mv asen4057test.txt asen4057.txt, ls
    - Rm asen4057.txt, ls
7) All the following are the terminal commands specified for this question:
    - Matlab
    - Top -- Matlab was top program
    - When matlab command was ran the CPU took of 91.3% and the memory was 63.6%. Note that a value of 4000 was used instead as the program crashed with any higher values. When not running the computations the percents were CPU = 16.6% and MEM = 50.1%. The runtime took 6.413 seconds
    - With nice command of -15 the computation tok 3.24 seconds and only took up 26.1% CPU and 51.0% MEM. This run more efficiently than the previous run which makes sense because the programs with lower nice values are provided more CPU time by the processor.
8) The actual executable for matlab is located in directory ~/usr/local/bin and can be started without full directory name because we set up symbolic links upon installation.
9) The bash shell searches for programs in the /bin directories for programs to be ran on the VM. This information is stored in the $PATH environment variable and can be changed using the setenv command and specifying a new directory path.
10) The single command required to take the contents of /usr/bin and /bin, sort and write them to a file in ~/Documents named usefulprogams.txt is as follows:
Ls -lrt /usr/bin /bin > ~/Documents/usefulprograms.txt

11) The default terminal for your VM is /home/username which is stored by the environment variable $HOME in .login when set.
12) It was verified that the default editor was not set by using the command printenv in the default directory and checking that no variable by the name of $EDITOR existed. To then set a default text editor the command export EDITOR=”usr/bin/nano” was used in the terminal. This fix now allowed the user to run the command nano a the default text editor whenever the command edit was utilized.