

# Homework 1 - ME 469

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Due 9/23/2021

## Question 1

Completed within Piazza

## Question 2

- a) Elementary OS
- b) Pay what you can model - suggested amounts include 10, 20 and 30 dollars, however it can be downloaded for free
- c) Managed by an organization - elementary, Inc. Support includes an active community powered stack exchange.
- d) Debian Package Management System, can utilize APT (Advanced Packaging Tool) frontend. Additionally, the system includes its own application center (AppCenter) which is able to install applications within the OS that are published to the marketplace.
- e) The OS is designed as a fully functional desktop with minimal bloatware and sleek aesthetics, so primarily focused towards desktop users looking for a UI similar to Mac OS with a focus on productivity

## Question 3

- a) `pwd`
- b) `cd somedir`
- c) `ls`
- d) `ls | grep -E ".+\.txt$"`

- e) `tail -n 2 sometext.txt`
- f) `cat sometext.txt`

## Question 4

File uploaded as task4.sh

## Question 5

- a) No
- b) gcc 10.3.1 20210422 (Red Hat 10.3.1-1)
- c) gcc 9.4.0 is available to be loaded as a module
- d) `module purge --force`
- e) Eigen - Eigen is a c++ template library that is used primarily for linear algebra, matrix and vector operations, geometrical transformations, etc.

## Question 6

- a) Completed - Files submitted with assignment
- b) Completed and executed in Shell
- c) Completed and executed in Shell
- d) For `first_script.sh`: The script prints the words "Hello World" to the terminal.  
For `for_script.sh`: The script prints the numbers from 10 - 0 on the same line with no spaces, looking like: 10987654321  
For `if_script.sh`: The script prompts me to enter a number, and then identifies if the number has one digit or two digits (though the script assumes that every value larger than 10 has two digits which is not accurate as entries can be larger than 2 digits)
- e) For `first_script.sh`: The script asks for a planet name, reads whatever is entered and saves as variable "planet" and then prints "Hello *entered planet*"  
For `for_script.sh`: The script prints the numbers from 0 to 20 counting up by two, printing each number on a new line  
For `if_script.sh`: The script asks for an entry and then determines if the entry has one digit, two digits, or more than two digits, and prints the appropriate response based on a comparison of the entry variable to two different if statements