**Project 1**  
In this project, create a new directory called 'project1' in the Vagrant home directory. For the included files, simply copy the content, paste it into a file using the vim editor and save the files in this location, naming them as specified.

1. Given a file **students.txt** with the following format: **Name Age Grade**, write an **awk** command to calculate the average grade of the students.

John 19 85

Doe 20 78

Mary 21 90

a. Using the same **students.txt**, use **awk** to list students who are older than 19 and have scored more than 80.

b. Print the total number of fields in each line of a given file using **awk**.

1. Replace every occurrence of the word "error" with "info" in the attached log file (filtering.log)
2. Delete all lines containing the word "obsolete" from the configuration file “db.ini”.
3. Convert all occurrences of "http://" to "https://" in the file named **urls.txt**.
4. Search for all lines in the file (numbers.txt) that start with a number.
5. Extract all email addresses from a file named **contacts.txt**.
6. Given a CSV file **data.csv**, extract the 3rd and 5th columns.
7. Use **grep** and **awk** to find the total memory used by a process named "myApp" from the **ps aux** command.
8. Use **cut** and **sed** to extract and format the date from a log file entry format like: **[2022-01-15 10:15:32] ERROR: App crashed**.
9. Use **grep**, **awk**, or **sed** to transform a file with entries like:

product=apple,price=1.2

product=banana,price=0.8

into:

apple costs 1.2

banana costs 0.8