Assignment 2

1. Print all lines containing the string Lane

1a.A screenshot of a computer screen

Description automatically generated

1b. At it’s base level, the grep command searches a file for a keyword. In the screenshot here I am searching for the keyword ‘Lane’ in the file GrepLab. After searching, a list of the results containing Lane is shown.

2. Print all lines where the person’s first name starts with H

2a. A screenshot of a computer

Description automatically generated

2b. Utilizing the ^ regex, I can search for a specific character at the start of each line. As the structure of the file lists names at the very start, I can utilize ^H to find any person whose name starts with an H. It’s also very important to remember that unless I include -I, the search will be case sensitive.

3. Print all lines ending in three zeros (000)

3a. A screenshot of a computer

Description automatically generated

3b. Utilizing the $ regex, I can search for a specific character at the end of lines. Using x$, I can find the lines that have the specific character I’m looking for at the end of the lines.

4. Print all lines that don’t contain 408

4a. A black screen with white text

Description automatically generated

4b. Utilizing the -v switch I can exclude specific words, letters, or characters in my grep search.

5. Print all lines where birthdays are in the year 1935 (be careful of the

date format! it’s MM/DD/YY)

5a. A black screen with white text

Description automatically generated

5b. Knowing the format of the birthdays listed, we can search specifically for birthdays that occur 1935 by grepping the years listed that end in 35. With ‘/35’, we can search all of the lines specifically for any mention of a birthday occurring in the xx35th year.

6. Print all lines where the phone number is in an area code that starts

with an 8

6a. A computer screen shot of a black screen

Description automatically generated

6b. The . character matches any character and when the structure of the search is formatted as a phone number I can filter the search down to any number that begins with 8. By building a phone number comprised entirely of the . characters with the exception of 8 leading the query, I parsed the entire list of numbers and returned only the numbers starting with 8.

7. Print all lines containing an uppercase letter, followed by 4 lowercase letters, a space and one uppercase letter.

7a. A screenshot of a computer screen

Description automatically generated

7b. Searching for a range of characters is accomplished by building a range query. In this query you list which characters you wish to parse through and can formulate a grep search that can find your desired result. Something to keep in mind is that when using a space in a search query, you should wrap it with ‘’ so that the space is properly treated as a part of the search

8. Print lines where the address begins with a two or three digit number (so this would be 12 main st or 123 main street but not 1234 main street).

8a. A screenshot of a computer screen

Description automatically generated

8b. Grep allows us to filter by the amount of digits if you include {} brackets. So with [0-9]{2,3} we can say that we want the range of numbers to be between 0 and 9 and the number entries to be between a two digit number or a 3 digit number.

9. Print lines where the person lives in Mass or Illinois

9a. A black screen with white text

Description automatically generated

9b. The | character represents or, so when presenting it with options to choose from we can filter the list with an array of choices separated by |.

10. Print lines containing the addresses that aren’t on a street (You might

see St as shorthand for street)

10a. A computer screen shot of a black screen

Description automatically generated

10b. Utilizing -v and |, I can create a string that filters out all addresses that include a street or st.

References

<https://www.digitalocean.com/community/tutorials/grep-command-in-linux-unix>

<https://www.baeldung.com/linux/bash-escape-characters>

https://www.aholdengouveia.name/LinuxAdmin/Grep.html