

Francisco Laureano
CIS245

1. Change the name Jo to Josephine

```
flaureano@cis245-ubuntu:~$ sed -i 's/Jo/Josephine/' SedLab
flaureano@cis245-ubuntu:~$ cat SedLab
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300

Betty Boop:245-836-8357:635 Cutesy Lane, Hollywood, CA 91464:6/23/23:14500

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400

Holly Golightly:397-857-2735:74 Fine Street, Dearborn, MI 23874:3/28/45:245700

Ebenezer Scrooge:548 831 2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

Hester Prynne:408-253-3122:123 Park St., San Josephinese, CA 04086:7/25/53:85100

Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100

Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200

Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200

Lizzie Bennett:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900

Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900

Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200

Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500
```

1a. s/Jo/Josephine/ substitutes the input (Jo) with the output (Josephine). How this works is the following: s(replace switch)/target_text/replacement_text/

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2. Delete the last 5 lines.

```
flaureano@cis245-ubuntu:~$ sed -i '48,$d' SedLab
flaureano@cis245-ubuntu:~$ cat SedLab
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300

Betty Boop:245-836-8357:635 Cutesy Lane, Hollywood, CA 91464:6/23/23:14500

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400

Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700

Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

Hester Prynne:408-253-3122:123 Park St., San Josephinese, CA 04086:7/25/53:85100

Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100

Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200

Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200

Lizzie Bennett:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900

Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900

Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200

Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500

Ephram Hardy:293-259-5395:235 CarltonLane, Josephineliet, IL 73858:8/12/20:56700

Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000

Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500

Hemione Granger:408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600

Mary Poppins:846-836-2837:6937 Ware Road, Milton, PA 93756:9/21/46:43500

Sir Lancelot:837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500

Minerva McGonagall:408-233-8971:45 Rose Terrace, San Francisco, CA 92303:2/3/36:25000

Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500

Dorothy Gale:923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000

Popeye Sailor:156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350

Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
flaureano@cis245-ubuntu:~$
```

2a. Use sed '48,\$d' to delete the last 5 lines starting from line 48. The command starts at line 48 and then deletes all lines after that (line 49 onwards) until the end of the file.

3. Print lines 3-15.

```
flaureano@cis245-ubuntu:~$ sed -n '3,15p' SedLab
Betty Boop:245-836-8357:635 Cutesy Lane, Hollywood, CA 91464:6/23/23:14500

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400

Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700

Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

Hester Prynne:408-253-3122:123 Park St., San Josephinese, CA 04086:7/25/53:85100

Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100

Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
```

3a. Input sed -n 3,15p to print lines 3-15. -n is no print which removes all of the text printing from this query but then the results from the query are brought back by p. sed -n(no print) '3(line start), 15(line end)p(print these results only).

4. Delete lines for people who live in California

```
flaureano@cis245-ubuntu:~$ sed -i '/CA/d' SedLab
flaureano@cis245-ubuntu:~$ cat SedLab
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400
Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700
Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
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Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200
Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500
Ephram Hardy:293-259-5395:235 CarltonLane, Josephineliet, IL 73858:8/12/20:56700
Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000
Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500
Hemione Granger:408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600
Mary Poppins:846-836-2837:6937 Ware Road, Milton, PA 93756:9/21/46:43500
Sir Lancelot:837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500

Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500
Dorothy Gale:923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000
Popeye Sailor:156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350
Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
```

4a. Sed '/CA/d' searches for the keyword /CA/ and then deletes the line that matches the keyword.
Sed 'CA(text to match)/d(deletes lines that have matching text)'

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5. Print all lines where the birthdays are in the first week of the month. Be careful of the dates for birthdays, the format is MM/DD/YY

```
flaureano@cis245-ubuntu:~$ sed -n '/\[1-7]\//p' SedLab
Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200
Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000
Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500
Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500
Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
flaureano@cis245-ubuntu:~$
```

5a. -n is no print which removes all of the text printing from this query but then the results from the query are brought back by /p which prints just the results from the query. This query searches the numbers range 0-7 between two forward slashes (/1-7/). The V characters allow the forward slashes related to the date to be recognized as apart of the query instead of a separate command. As for the format of the command, the V[1-7]V represents the day component of MM/DD/YY and allows me to find entries that fall within that 1st day all the way to the 7th day.

6. Append three asterisks (*) to the end of lines starting with Sir

```
flaureano@cis245-ubuntu:~$ sed -i '/^Sir/ s/$/ ***/' SedLab
flaureano@cis245-ubuntu:~$ cat SedLab
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400
Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700
Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Lizzie Bennett:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200
Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500
Ephram Hardy:293-259-5395:235 CarltonLane, Josephineliet, IL 73858:8/12/20:56700
Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000
Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500
Hemione Granger:408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600
Mary Poppins:846-836-2837:6937 Ware Road, Milton, PA 93756:9/21/46:43500
Sir Lancelot:837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500 ***

Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500
Dorothy Gale:923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000
Popeye Sailor:156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350
Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
flaureano@cis245-ubuntu:~$
```

6a. ^ matches a keyword (Sir) at the start of the line and then substitutes the space at the end of the line (\$) with ***.

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7. Replace the line containing "Westley Pirate" with the phrase "As you wish." Make sure you replace the whole line not just the name

```
-
flaureano@cis245-ubuntu:~$ sed -i '/Westley Pirate/c\ As You Wish' SedLab
flaureano@cis245-ubuntu:~$ cat SedLab
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300

Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400
Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700
Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900

As You Wish

As You Wish

As You Wish

Lizzie Bennett:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200
Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500
Ephram Hardy:293-259-5395:235 CarltonLane, Josephineliet, IL 73858:8/12/20:56700
Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000
Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500
Hemione Granger:408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600
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Sir Lancelot:837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500 ***

Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500
Dorothy Gale:923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000
Popeye Sailor:156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350
Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
flaureano@cis245-ubuntu:~$ █
```

7a. The initial forward slashes (**/text/**) allows me to target specific text and then exchange that text by using the **c/** switch any line containing Westley Pirate with As You Wish. With these slashes, the file is scanned for the keyword Westley Pirate and exchanges any lines found with As You Wish.

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8. Change Minerva McGonagall's birthday to 10/04/1935. Assume you don't know Minerva's original birthday. Use a regular expression to search for it.

```
flaureano@cis245-ubuntu:~$ sed -n '/Minerva McGonagall/s/[0-9]\{1,2\}\V/[0-9]\{1,2\}\V/[0-9]\{2\}/10\04\35/p' SedLab2
Minerva McGonagall:408-233-8971:45 Rose Terrace, San Francisco, CA 92303:10/04/35:25000
flaureano@cis245-ubuntu:~$
```

8a. `sed -n '/Minerva McGonagall/s/[0-9]\{1,2\}\V/[0-9]\{1,2\}\V/[0-9]\{2\}/10\04\35/p'`

To parse our file for Minerva's information, we target her name with `/Minerva McGonagall/`. Any lines found will then substitute any MM/DD/YY text found within the line with her new birthday of 10/04/35. This does not require any prior knowledge of the existing birthday because we have the knowledge of the birthday format (MM/DD/YY) so any birthday that Minerva had prior would be replaced.

9. Delete all blank lines.

```
flaureano@cis245-ubuntu:~$ sed '/^$/d' SedLab2
Huckleberry Finn:238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300
Betty Boop:245-836-8357:635 Cutesy Lane, Hollywood, CA 91464:6/23/23:14500
Dorian Gray:385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400
Holly Golightly:397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700
Ebenezer Scrooge:548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900
Hester Prynne:408-253-3122:123 Park St., San Josephinese, CA 04086:7/25/53:85100
Westley Pirate:284-758-2857:23 Edgecliff Place, Lincoln , NB 92743:7/25/53:85100
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Westley Pirate:284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200
Lizzie Bennett:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Nancy Drew:674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900
Josephine March:327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200
Victor Frankenstein:835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500
Ephram Hardy:293-259-5395:235 CarltonLane, Josephineli, IL 73858:8/12/20:56700
Meg Murry:834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000
Lucy Pevensie:385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500
Hemione Granger:408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600
Mary Poppins:846-836-2837:6937 Ware Road, Milton, PA 93756:9/21/46:43500
Sir Lancelot:837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500
Minerva McGonagall:408-233-8971:45 Rose Terrace, San Francisco, CA 92303:2/3/36:25000
Zippy Pinhead:834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500
Dorothy Gale:923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000
Popeye Sailor:156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350
Luna Lovegood:385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600
Daenerys Targaryen:408-724-0140:1222 Oxbow Court, Sunnyvale, CA 94087:5/19/66:34200
Molly Weasley:387-827-1095:13 Uno Lane, Ashville, NC 23556:7/1/29:57000
Arya Stark:438-910-7449:8235 Maple Street, Wilmington, VM 29085:9/23/63:68900
flaureano@cis245-ubuntu:~$
```

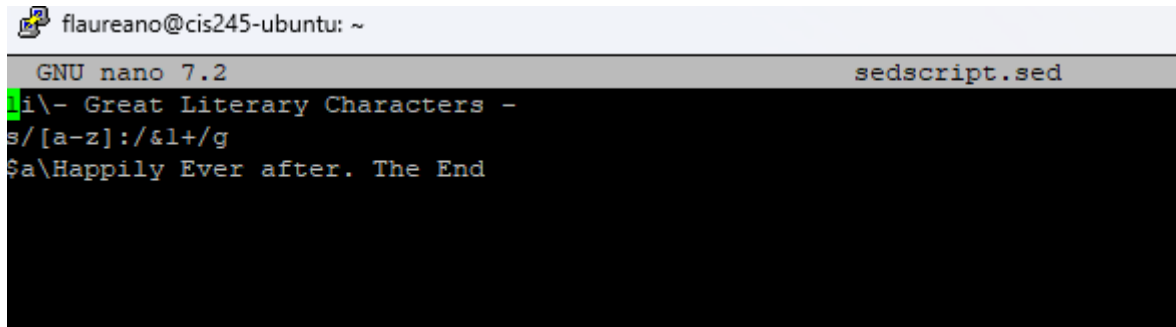
9a. `^$` finds any lines that have no characters between the start (^) and the end of the line (\$) and then those lines get removed with `/d`.

10. Write a sed script that will (actual sed script, NOT just the commands on the command line)

(a) Insert above the first line the title - Great Literary Characters -.

(b) Print the contents of the file, but instead of the phone number starting with an area code, have it start with a 1+, then include the area code and number. For example, (603)123-1234 would turn into 1+(603)123-1234

(c) Append at the end of the file "Happily Ever after. The End



```
flaureano@cis245-ubuntu: ~  
GNU nano 7.2 sedscrip.t.sed  
1i\ - Great Literary Characters -  
s/[a-z]:/&1+/g  
$a\ Happily Ever after. The End
```

10a. 1i inserts at the first line and puts - Great Literary Characters in the line

10b. Im using substitute (s/) and & (matched keyword so in this case it's the [a-z]:) to pair together my keyword search [a-z]: (which is the end of the persons name followed by the colon the next to their name) and then adding 1+ to it globally (/g)

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10c. \$a appends at the end of the file(the last line) the text Happily Ever After

```
flaureano@cis245-ubuntu: ~  
flaureano@cis245-ubuntu:~$ nano sedscript.sed  
flaureano@cis245-ubuntu:~$ sed -f sedscript.sed SedLab3  
- Great Literary Characters -  
Huckleberry Finn:1+238-923-7366:95 Latham Lane, Easton, PA 83755:11/12/56:20300  
  
Betty Boop:1+245-836-8357:635 Cutesy Lane, Hollywood, CA 91464:6/23/23:14500  
  
Dorian Gray:1+385-375-8395:3567 Populus Place, Caldwell, NJ 23875:6/18/68:23400  
  
Holly Golightly:1+397-857-2735:74 Pine Street, Dearborn, MI 23874:3/28/45:245700  
  
Ebenezer Scrooge:1+548-834-2348:583 Laurel Ave., Kingsville, TX 83745:10/1/35:58900  
  
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Westley Pirate:1+284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200  
  
Westley Pirate:1+284-758-2867:23 Edgecliff Place, Lincoln, NB 92743:11/3/35:58200  
  
Lizzie Bennett:1+674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900  
  
Nancy Drew:1+674-843-1385:20 Parak Lane, Duluth, MN 23850:4/12/23:780900  
  
Jo March:1+327-832-5728:3465 Mirlo Street, Peabody, MA 34756:10/2/65:35200  
  
Victor Frankenstein:1+835-365-1284:454 Easy Street, Decatur, IL 75732:2/28/53:123500  
  
Ephram Hardy:1+293-259-5395:235 CarltonLane, Joliet, IL 73858:8/12/20:56700  
  
Meg Murry:1+834-938-8376:23445 Aster Ave., Allentown, NJ 83745:12/1/38:45000  
  
Lucy Pevensie:1+385-573-8326:832 Ponce Drive, Gzary, IN 83756:12/1/46:268500  
  
Hemione Granger:1+408-456-1234:4 Harvard Square, Boston, MA 02133:4/22/62:52600  
  
Mary Poppins:1+846-836-2837:6937 Ware Road, Milton, PA 93756:9/21/46:43500  
  
Sir Lancelot:1+837-835-8257:474 Camelot Boulevard, Bath, WY 28356:5/13/69:24500  
  
Minerva McGonagall:1+408-233-8971:45 Rose Terrace, San Francisco, CA 92303:2/3/36:25  
  
Zippy Pinhead:1+834-823-8319:2356 Bizarro Ave., Farmount, IL 84357:1/1/67:89500  
  
Dorothy Gale:1+923-835-8745:23 Wimp Lane, Kensington, DL 38758:8/31/69:126000  
  
Popeye Sailor:1+156-454-3322:945 Bluto Street, NotHere, USA 29358:3/19/35:22350  
  
Luna Lovegood:1+385-898-8357:38 Fife Way, Abilene, TX 39673:1/5/58:95600  
  
Daenerys Targaryen:1+408-724-0140:1222 Oxbow Court, Sunnyvale, CA 94087:5/19/66:3420  
  
Molly Weasley:1+387-827-1095:13 Uno Lane, Ashville, NC 23556:7/1/29:57000  
  
Arya Stark:1+438-910-7449:8235 Maple Street, Wilmington, VM 29085:9/23/63:68900  
Happily Ever after. The End
```


Works Cited

<https://www.grymoire.com/Unix/Sed.html#uh-62o>

https://www.gnu.org/software/sed/manual/html_node/sed-commands-list.html

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