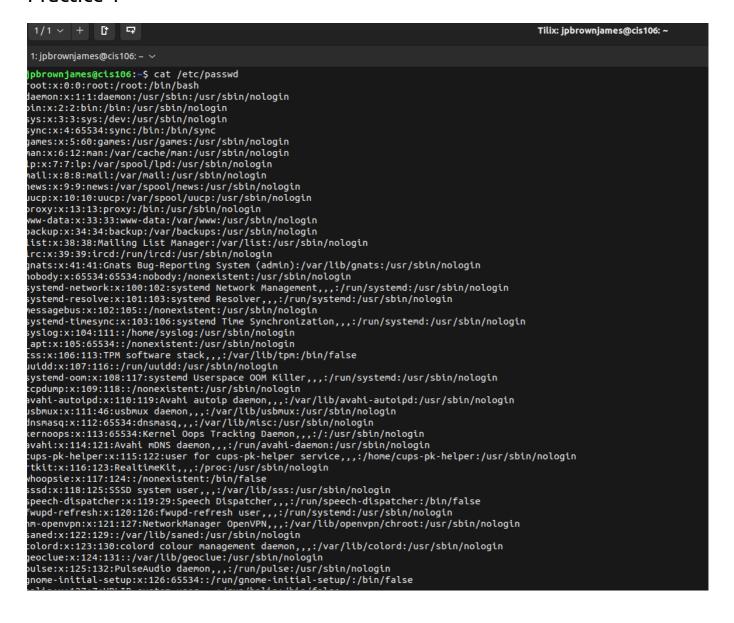
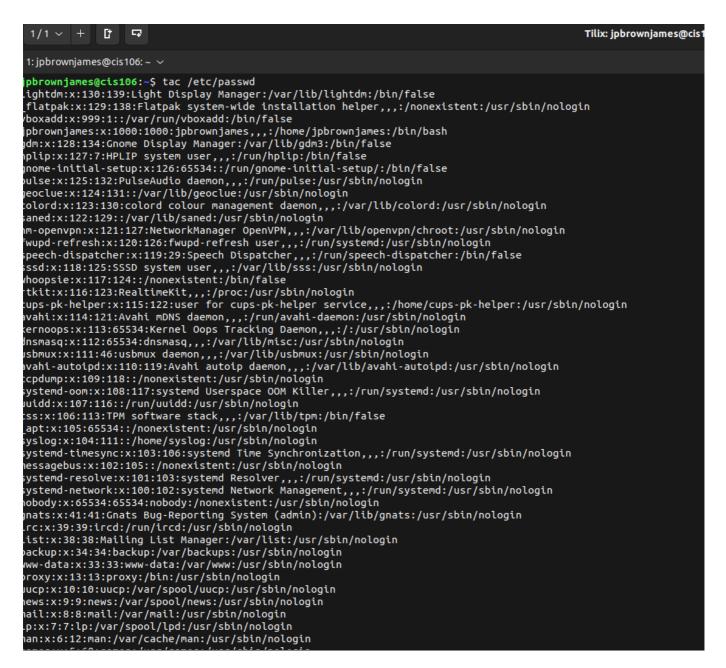
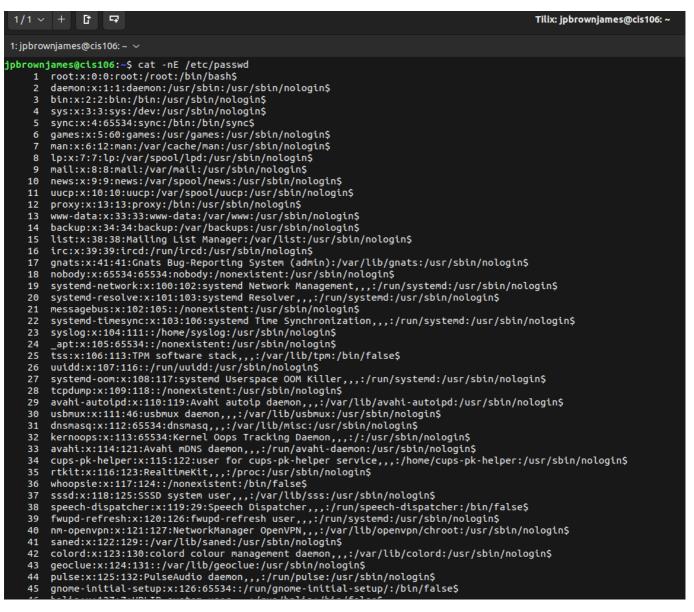
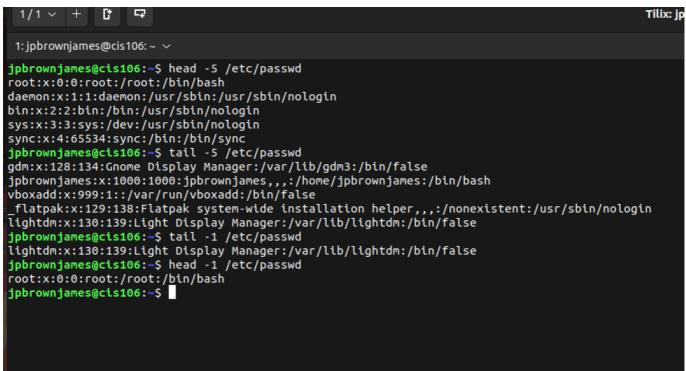
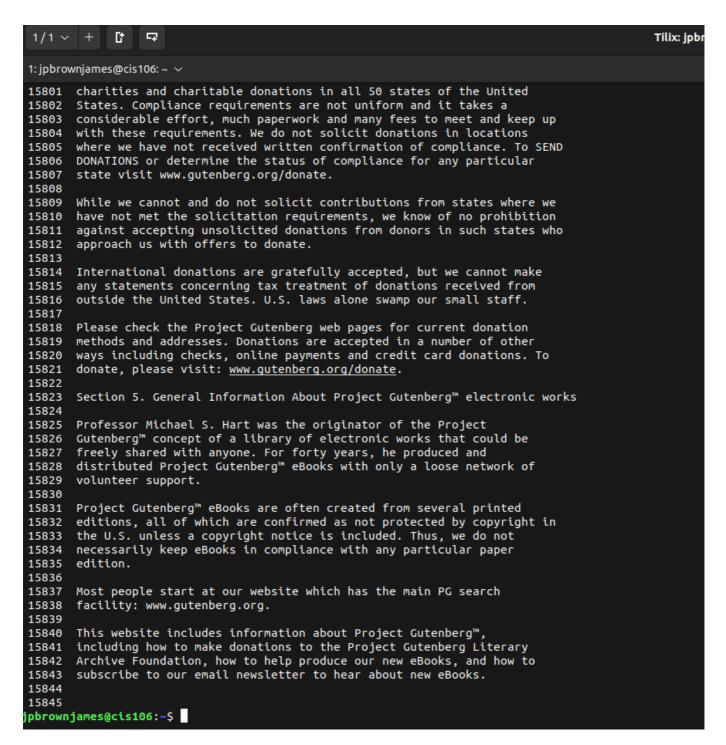
## Practice 1









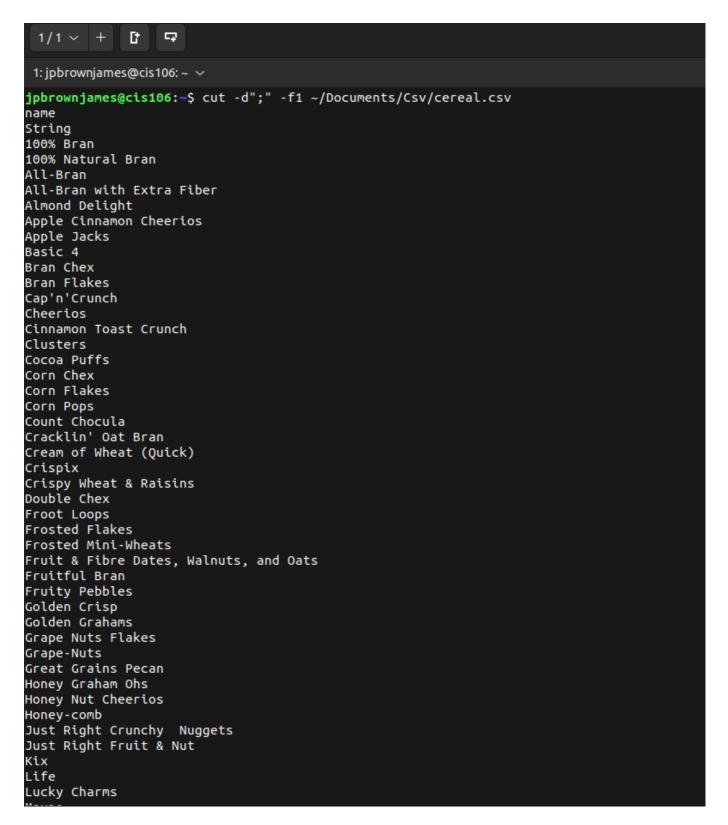


## Practice 2

```
1/1 ~ | +
               C†
                    귝
 1: jpbrownjames@cis106: ~ ~
jpbrownjames@cis106:~$ cut -d":" -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
ргоху
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
messagebus
systemd-timesync
syslog
apt
tss
uuidd
systemd-oom
tcpdump
avahi-autoipd
usbmux
dnsmasq
kernoops
avahi
cups-pk-helper
rtkit
whoopsie
sssd
speech-dispatcher
fwupd-refresh
nm-openvpn
saned
colord
geoclue
pulse
gnome-initial-setup
```

```
Ľ
 1: jpbrownjames@cis106: ~ ~
jpbrownjames@cis106:~$ cut -d":" -f1,6 /etc/passwd
root:/root
daemon:/usr/sbin
bin:/bin
sys:/dev
sync:/bin
games:/usr/games
man:/var/cache/man
lp:/var/spool/lpd
mail:/var/mail
news:/var/spool/news
uucp:/var/spool/uucp
proxy:/bin
www-data:/var/www
backup:/var/backups
list:/var/list
irc:/run/ircd
gnats:/var/lib/gnats
nobody:/nonexistent
systemd-network:/run/systemd
systemd-resolve:/run/systemd
messagebus:/nonexistent
systemd-timesync:/run/systemd
syslog:/home/syslog
apt:/nonexistent
tss:/var/lib/tpm
uuidd:/run/uuidd
systemd-oom:/run/systemd
tcpdump:/nonexistent
avahi-autoipd:/var/lib/avahi-autoipd
usbmux:/var/lib/usbmux
dnsmasq:/var/lib/misc
kernoops:/
avahi:/run/avahi-daemon
cups-pk-helper:/home/cups-pk-helper
rtkit:/proc
whoopsie:/nonexistent
sssd:/var/lib/sss
speech-dispatcher:/run/speech-dispatcher
fwupd-refresh:/run/systemd
nm-openvpn:/var/lib/openvpn/chroot
saned:/var/lib/saned
colord:/var/lib/colord
geoclue:/var/lib/geoclue
pulse:/run/pulse
gnome-initial-setup:/run/gnome-initial-setup/
```

```
Tilix: jpb
                 □ □
 1: jpbrownjames@cis106: ~ ~
jpbrownjames@cis106:~$ cut -d":" -f1,6,6 --output-delimiter=" > " /etc/passwd
root > /root
daemon > /usr/sbin
bin > /bin
sys > /dev
sync > /bin
games > /usr/games
man > /var/cache/man
lp > /var/spool/lpd
mail > /var/mail
news > /var/spool/news
uucp > /var/spool/uucp
proxy > /bin
www-data > /var/www
backup > /var/backups
list > /var/list
irc > /run/ircd
gnats > /var/lib/gnats
nobody > /nonexistent
systemd-network > /run/systemd
systemd-resolve > /run/systemd
messagebus > /nonexistent
systemd-timesync > /run/systemd
syslog > /home/syslog
_apt > /nonexistent
tss > /var/lib/tpm
uuidd > /run/uuidd
systemd-oom > /run/systemd
tcpdump > /nonexistent
avahi-autoipd > /var/lib/avahi-autoipd
usbmux > /var/lib/usbmux
dnsmasq > /var/lib/misc
kernoops > /
avahi > /run/avahi-daemon
cups-pk-helper > /home/cups-pk-helper
rtkit > /proc
whoopsie > /nonexistent
sssd > /var/lib/sss
speech-dispatcher > /run/speech-dispatcher
fwupd-refresh > /run/systemd
nm-openvpn > /var/lib/openvpn/chroot
saned > /var/lib/saned
colord > /var/lib/colord
geoclue > /var/lib/geoclue
pulse > /run/pulse
gnome-initial-setup > /run/gnome-initial-setup/
```



```
1/1 > + []
                                                                                                    Tilix: jpbrownjames@cis10
 1: jpbrownjames@cis106: ~ ~
jpbrownjames@cis106:~$ cut -d";" -f1,4 --output-delimiter=" calories = " ~/Documents/Csv/cereal.csv
name calories = calories
String calories = Int
100% Bran calories = 70
100% Natural Bran calories = 120
All-Bran calories = 70
All-Bran with Extra Fiber calories = 50
Almond Delight calories = 110
Apple Cinnamon Cheerios calories = 110
Apple Jacks calories = 110
Basic 4 calories = 130
Bran Chex calories = 90
Bran Flakes calories = 90
Cap'n'Crunch calories = 120
Cheerios calories = 110
Cinnamon Toast Crunch calories = 120
Clusters calories = 110
Cocoa Puffs calories = 110
Corn Chex calories = 110
Corn Flakes calories = 100
Corn Pops calories = 110
Count Chocula calories = 110
Cracklin' Oat Bran calories = 110
Cream of Wheat (Quick) calories = 100
Crispix calories = 110
Crispy Wheat & Raisins calories = 100
Double Chex calories = 100
Froot Loops calories = 110
Frosted Flakes calories = 110
Frosted Mini-Wheats calories = 100
Fruit & Fibre Dates, Walnuts, and Oats calories = 120
Fruitful Bran calories = 120
Fruity Pebbles calories = 110
Golden Crisp calories = 100
Golden Grahams calories = 110
Grape Nuts Flakes calories = 100
Grape-Nuts calories = 110
Great Grains Pecan calories = 120
Honey Graham Ohs calories = 120
Honey Nut Cheerios calories = 110
Honey-comb calories = 110
Just Right Crunchy Nuggets calories = 110
Just Right Fruit & Nut calories = 140
Kix calories = 110
Life calories = 100
Lucky Charms calories = 110
```

## Practice 3

```
Lt
1: jpbrownjames@cis106: ~ ~
pbrownjames@cis106:~$ sort ~/Documents/Csv/cars.csv
AMC Ambassador Brougham;13.0;8;360.0;175.0;3821.;11.0;73;US
MC Ambassador DPL;15.0;8;390.0;190.0;3850.;8.5;70;US
AMC Ambassador SST;17.0;8;304.0;150.0;3672.;11.5;72;US
MC Concord;19.4;6;232.0;90.00;3210.;17.2;78;US
AMC Concord;24.3;4;151.0;90.00;3003.;20.1;80;US
AMC Concord d/l;18.1;6;258.0;120.0;3410.;15.1;78;US
MC Concord DL;23.0;4;151.0;0;3035.;20.5;82;US
MC Concord DL 6;20.2;6;232.0;90.00;3265.;18.2;79;US
MC Gremlin;18.0;6;232.0;100.0;2789.;15.0;73;US
AMC Gremlin;19.0;6;232.0;100.0;2634.;13.0;71;US
AMC Gremlin;20.0;6;232.0;100.0;2914.;16.0;75;US
   Gremlin;21.0;6;199.0;90.00;2648.;15.0;70;US
AMC Hornet;18.0;6;199.0;97.00;2774.;15.5;70;US
MC Hornet;18.0;6;232.0;100.0;2945.;16.0;73;US
MC Hornet;19.0;6;232.0;100.0;2901.;16.0;74;US
MC Hornet;22.5;6;232.0;90.00;3085.;17.6;76;US
MC Hornet Sportabout (sw);18.0;6;258.0;110.0;2962.;13.5;71;US
AMC Matador;14.0;8;304.0;150.0;3672.;11.5;73;US
AMC Matador;15.0;6;258.0;110.0;3730.;19.0;75;US
AMC Matador;15.5;8;304.0;120.0;3962.;13.9;76;US
AMC Matador;16.0;6;258.0;110.0;3632.;18.0;74;US
AMC Matador;18.0;6;232.0;100.0;3288.;15.5;71;US
MC Matador (sw);14.0;8;304.0;150.0;4257.;15.5;74;US
MC Matador (sw);15.0;8;304.0;150.0;3892.;12.5;72;US
MC Pacer;19.0;6;232.0;90.00;3211.;17.0;75;US
AMC Pacer d/l;17.5;6;258.0;95.00;3193.;17.8;76;US
   Rebel SST;16.0;8;304.0;150.0;3433.;12.0;70;US
   Rebel SST (sw);0;8;360.0;175.0;3850.;11.0;70;US
AMC Spirit DL;27.4;4;121.0;80.00;2670.;15.0;79;US
Audi 100LS;20.0;4;114.0;91.00;2582.;14.0;73;Europe
Audi 100LS;23.0;4;115.0;95.00;2694.;15.0;75;Europe
Audi 100 LS;24.0;4;107.0;90.00;2430.;14.5;70;Europe
Audi 4000;34.3;4;97.00;78.00;2188.;15.8;80;Europe
Audi 5000;20.3;5;131.0;103.0;2830.;15.9;78;Europe
Audi 5000s (diesel);36.4;5;121.0;67.00;2950.;19.9;80;Europe
Audi Fox;29.0;4;98.00;83.00;2219.;16.5;74;Europe
MW 2002;26.0;4;121.0;113.0;2234.;12.5;70;Europe
MW 320i;21.5;4;121.0;110.0;2600.;12.8;77;Europe
Buick Century;17.0;6;231.0;110.0;3907.;21.0;75;US
Buick Century;22.4;6;231.0;110.0;3415.;15.8;81;US
Buick Century 350;13.0;8;350.0;175.0;4100.;13.0;73;US
Buick Century Limited;25.0;6;181.0;110.0;2945.;16.4;82;US
Buick Century Luxus (sw);13.0;8;350.0;150.0;4699.;14.5;74;US
Buick Century Special;20.6;6;231.0;105.0;3380.;15.8;78;US
Buick Electra 225 Custom;12.0;8;455.0;225.0;4951.;11.0;73;US
```

```
1/1 ~ +
                                                                                                      Tilix: jpbrownjames@c
                D*
 1: jpbrownjames@cis106: ~/Documents/Csv ~
                                                                                                                AĬ 🗆
jpbrownjames@cis106:~/Documents/Csv$ sort -o sorted_cars.csv cars.csv
jpbrownjames@cis106:~/Documents/Csv$ wc -l sorted_cars.csv
408 sorted_cars.csv
jpbrownjames@cis106:~/Documents/Csv$ wc -m sorted_cars.csv
22663 sorted_cars.csv
jpbrownjames@cis106:~/Documents/Csv$ cat sorted_cars.csv | tr ';' ','
AMC Ambassador Brougham, 13.0, 8, 360.0, 175.0, 3821., 11.0, 73, US
AMC Ambassador DPL,15.0,8,390.0,190.0,3850.,8.5,70,US
AMC Ambassador SST,17.0,8,304.0,150.0,3672.,11.5,72,US
AMC Concord,19.4,6,232.0,90.00,3210.,17.2,78,US
AMC Concord, 24.3, 4, 151.0, 90.00, 3003., 20.1, 80, US
AMC Concord d/l,18.1,6,258.0,120.0,3410.,15.1,78,US
AMC Concord DL,23.0,4,151.0,0,3035.,20.5,82,US
AMC Concord DL 6,20.2,6,232.0,90.00,3265.,18.2,79,US
AMC Gremlin,18.0,6,232.0,100.0,2789.,15.0,73,US
AMC Gremlin,19.0,6,232.0,100.0,2634.,13.0,71,US
AMC Gremlin,20.0,6,232.0,100.0,2914.,16.0,75,US
AMC Gremlin,21.0,6,199.0,90.00,2648.,15.0,70,US
AMC Hornet, 18.0,6,199.0,97.00,2774.,15.5,70,US
AMC Hornet, 18.0, 6, 232.0, 100.0, 2945., 16.0, 73, US
AMC Hornet,19.0,6,232.0,100.0,2901.,16.0,74,US
AMC Hornet,22.5,6,232.0,90.00,3085.,17.6,76,US
AMC Hornet Sportabout (sw),18.0,6,258.0,110.0,2962.,13.5,71,US
AMC Matador, 14.0, 8, 304.0, 150.0, 3672., 11.5, 73, US
AMC Matador, 15.0,6,258.0,110.0,3730.,19.0,75,US
AMC Matador, 15.5, 8, 304.0, 120.0, 3962., 13.9, 76, US
AMC Matador,16.0,6,258.0,110.0,3632.,18.0,74,US
AMC Matador,18.0,6,232.0,100.0,3288.,15.5,71,US
AMC Matador (sw),14.0,8,304.0,150.0,4257.,15.5,74,US
AMC Matador (sw),15.0,8,304.0,150.0,3892.,12.5,72,US
AMC Pacer, 19.0,6,232.0,90.00,3211.,17.0,75,US
AMC Pacer d/l,17.5,6,258.0,95.00,3193.,17.8,76,US
AMC Rebel SST,16.0,8,304.0,150.0,3433.,12.0,70,US
AMC Rebel SST (sw),0,8,360.0,175.0,3850.,11.0,70,US
AMC Spirit DL,27.4,4,121.0,80.00,2670.,15.0,79,US
Audi 100LS,20.0,4,114.0,91.00,2582.,14.0,73,Europe
Audi 100LS,23.0,4,115.0,95.00,2694.,15.0,75,Europe
Audi 100 LS,24.0,4,107.0,90.00,2430.,14.5,70,Europe
Audi 4000,34.3,4,97.00,78.00,2188.,15.8,80,Europe
Audi 5000,20.3,5,131.0,103.0,2830.,15.9,78,Europe
Audi 5000s (diesel),36.4,5,121.0,67.00,2950.,19.9,80,Europe
Audi Fox,29.0,4,98.00,83.00,2219.,16.5,74,Europe
BMW 2002,26.0,4,121.0,113.0,2234.,12.5,70,Europe
BMW 320i,21.5,4,121.0,110.0,2600.,12.8,77,Europe
Buick Century,17.0,6,231.0,110.0,3907.,21.0,75,US
Buick Century,22.4,6,231.0,110.0,3415.,15.8,81,US
```

## practice 4

```
□ □
                                                                                                      Tilix: jpbrownjame
1: jpbrownjames@cis106: ~/Documents/Books 🗸
pbrownjames@cis106:~$ cd Documents/Books/
pbrownjames@cis106:~/Documents/Books$ grep -in "love" pride-and-prejudice.txt
::by allowance" and "loving with personal love." This distinction applies
 3:to their best work than in the case of those others who are loved "by
 5:proper thing to love them. And in the sect--fairly large and yet
 3:All the minor passages--the loves of Jane and Bingley, the advent of Mr.
6:aversion to actual love. I do not know whether the all-grasping hand of
 6:his falling in love at all is not extremely probable. Here again I
 B:injured in disposition, and thoroughly in love. As for his being in
 9:love, Elizabeth has given as just an exposition of the causes of that 1:anybody who can read between lines will not find the lovers'
 ::ladies with whom it might be a pleasure to fall in love; there are at
 4:Grant. I should have been most in love with Beatrix and Argemone; I
 5:"So much love and eloquence"
 6: _may_ fall in love with one of them, and therefore you must visit him as
 persuade you at last. I was sure you loved your girls too well to
 3:for your sakes we would do anything. Lydia, my love, though you _are_
2:dancing was a certain step towards falling in love; and very lively
  5:way to be very much in love; but she considered with pleasure that it
 30:very few of us who have heart enough to be really in love without
 50:in love as much as she chooses."
 57:imagination is very rapid; it jumps from admiration to love, from love
 64:Jane, make haste and tell us; make haste, my love.
 34:brother Gardiner's in town so much in love with her, that my
41:discovered the efficacy of poetry in driving away love!"
 43:"I have been used to consider poetry as the _food_ of love," said Darcy.
45:"Of a fine, stout, healthy love it may. Everything nourishes what is
 21:be a great loss to _me_ to have many such acquaintance. I dearly love a
 86:to-day. Lydia, my love, ring the bell. I must speak to Hill this
 25:His plan did not vary on seeing them. Miss Bennet's lovely face
 05:effects of your loveliness and amiable qualifications. As I must,
 07:shall choose to attribute it to your wish of increasing my love by
 45:successful love; for Mrs. Bennet, having dawdled about in the vestibule
 74:in love with you and wants him to marry Miss Darcy. She follows him to
 82:is not such a simpleton. Could she have seen half as much love in Mr.
 93:of being in love with you, he is very much in love with her friend."
 85:she dared to hope that so much love and eloquence awaited her there.
          "So much love and eloquence"
 41:publish his prosperous love.
 90:The possibility of Mr. Collins's fancying himself in love with her
46:while her health was so indifferent, and lovers were of all people the 61:dishonourable to the stability of her lover, she could not prevent its 80:and, luckily for the others, the business of love-making relieved them
 03:you. I feel as if I had never done you justice, or loved you as you
 14:whom I really love, and still fewer of whom I think well. The more I see
 84:known her much longer than they have known me; no wonder if they <mark>love</mark>
```

```
1:jpbrownjames@cis106:~/Documents/Books \rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
jpbrownjames@cis106:~/Documents/Books\rightarrow
```

