

Lab 7 Submission

Question 1: cat, head, tail

1. Content of `cereal.csv` file:

```
mauricio@cis106vm:~$ cd ~/Documents/Csv/
mauricio@cis106vm:~/Documents/Csv$ cat cereal.Csv
cat: cereal.Csv: No such file or directory
mauricio@cis106vm:~/Documents/Csv$ cat cereal.csv
name;nfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cup;rating
String;Categorical;Categorical;Int;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973
100% Natural Bran;Q;C;120;3;5;15;2;8;135;0;3;1;1;33.983679
All-Bran;K;C;70;4;1;260;9;7;5;320;25;3;1;0.33;59.425505
All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.704912
Almond Delight;R;C;110;2;2;200;1;14;8;-1;25;3;1;0.75;34.384843
Apple Cinnamon Cheerios;G;C;110;2;2;180;1.5;10.5;10;70;25;1;1;0.75;29.509541
Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094
Basic 4;G;C;130;3;2;210;2;18;8;100;25;3;1.33;0.75;37.038562
Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253
Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813
Cap'n Crunch;Q;C;120;1;2;220;0;12;12;35;25;2;1;0.75;18.042851
Cheerios;G;C;110;6;2;290;2;17;1;105;25;1;1;1.25;50.764999
Cinnamon Toast Crunch;G;C;120;1;3;210;0;13;9;45;25;2;1;0.75;19.823573
Clusters;G;C;110;3;2;140;2;13;7;105;25;3;1;0.5;40.400208
Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1;22.736446
Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019
Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324
Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.782791
Count Chocula;G;C;110;1;1;180;0;12;13;65;25;2;1;1;22.396513
Cracklin' Oat Bran;K;C;110;3;3;140;4;10;7;160;25;3;1;0.5;40.448772
Cream of Wheat (Quick);N;H;100;3;0;80;1;21;0;-1;0;2;1;1;64.533816
Crispix;K;C;110;2;0;220;1;21;3;30;25;3;1;1;46.895644
Crispy Wheat & Raisins;G;C;100;2;1;140;2;11;10;120;25;3;1;0.75;36.176196
Double Chex;R;C;100;2;0;190;1;18;5;80;25;3;1;0.75;44.330856
Froot Loops;K;C;110;2;1;125;1;11;13;30;25;2;1;1;32.207582
Frosted Flakes;K;C;110;1;0;200;1;14;11;25;25;1;1;0.75;31.435973
Frosted Mnl-Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;58.345141
Fruit & Fibre Dates, Walnuts, and Oats;P;C;120;3;2;160;5;12;10;200;25;3;1.25;0.67;40.917047
Fruitful Bran;K;C;120;3;0;240;5;14;12;190;25;3;1.33;0.67;41.015492
Fruity Pebbles;P;C;110;1;1;135;0;13;12;25;25;2;1;0.75;28.025765
Golden Crisp;P;C;100;2;0;45;0;11;15;40;25;1;1;0.88;35.252444
```

2. Content of `cereal.csv` file in reverse order:

```
mauricio@cis106vm:~/Documents/Csv$ tac cereal.csv
Wheaties Honey Gold;G;C;110;2;1;200;1;16;8;60;25;1;1;0.75;36.187559
Wheaties;G;C;100;3;1;200;3;17;3;110;25;1;1;1;51.592193
Wheat Chex;R;C;100;3;1;230;3;17;3;115;25;1;1;0.67;49.787445
Trix;G;C;110;1;1;140;0;13;12;25;25;2;1;1;27.753301
Triples;G;C;110;2;1;250;0;21;3;60;25;3;1;0.75;39.106174
Total Whole Grain;G;C;100;3;1;200;3;16;3;110;100;3;1;1;46.658844
Total Raisin Bran;G;C;140;3;1;190;4;15;14;230;100;3;1.5;1;28.592785
Total Corn Flakes;G;C;110;2;1;200;0;21;3;35;100;3;1;1;38.839746
Strawberry Fruit Wheats;N;C;90;2;0;15;3;15;5;90;25;2;1;1;59.363993
Special K;K;C;110;6;0;230;1;16;3;55;25;1;1;1;53.131324
Smacks;K;C;110;2;1;70;1;9;15;40;25;2;1;0.75;31.230054
Shredded Wheat spoon size;N;C;90;3;0;0;3;20;0;120;0;1;1;0.67;72.801787
Shredded Wheat 'n'Bran;N;C;90;3;0;0;4;19;0;140;0;1;1;0.67;74.472949
Shredded Wheat;N;C;80;2;0;0;3;16;0;95;0;1;0.83;1;68.235885
Rice Krispies;K;C;110;2;0;290;0;22;3;35;25;1;1;1;40.560159
Rice Chex;R;C;110;1;0;240;0;23;2;30;25;1;1;1.13;41.998933
Raisin Squares;K;C;90;2;0;0;2;15;6;110;25;3;1;0.5;55.333142
Raisin Nut Bran;G;C;100;3;2;140;2.5;10.5;8;140;25;3;1;0.5;39.703400
Raisin Bran;K;C;120;3;1;210;5;14;12;240;25;2;1.33;0.75;39.259197
Quaker Oatmeal;Q;H;100;5;2;0;2.7;-1;-1;110;0;1;1;0.67;50.828392
Quaker Oat Squares;Q;C;100;4;1;135;2;14;6;110;25;3;1;0.5;49.511874
Puffed Wheat;Q;C;50;2;0;0;1;10;0;50;0;3;0.5;1;63.005645
Puffed Rice;Q;C;50;1;0;0;0;13;0;15;0;3;0.5;1;60.756112
Product 19;K;C;100;3;0;320;1;20;3;45;100;3;1;1;41.503540
Post Nat. Raisin Bran;P;C;120;3;1;200;6;11;14;260;25;3;1.33;0.67;37.840594
Oatmeal Raisin Crisp;G;C;130;3;2;170;1.5;13.5;10;120;25;3;1.25;0.5;30.450843
Nutri-grain Wheat;K;C;90;3;0;170;3;18;2;90;25;3;1;1;59.642837
Nutri-Grain Almond-Raisin;K;C;140;3;2;220;3;21;7;130;25;3;1.33;0.67;40.692320
Nut&Honey Crunch;K;C;120;2;1;190;0;15;9;40;25;2;1;0.67;29.924285
Multi-Grain Cheerios;G;C;100;2;1;220;2;15;6;90;25;1;1;1;40.105965
```

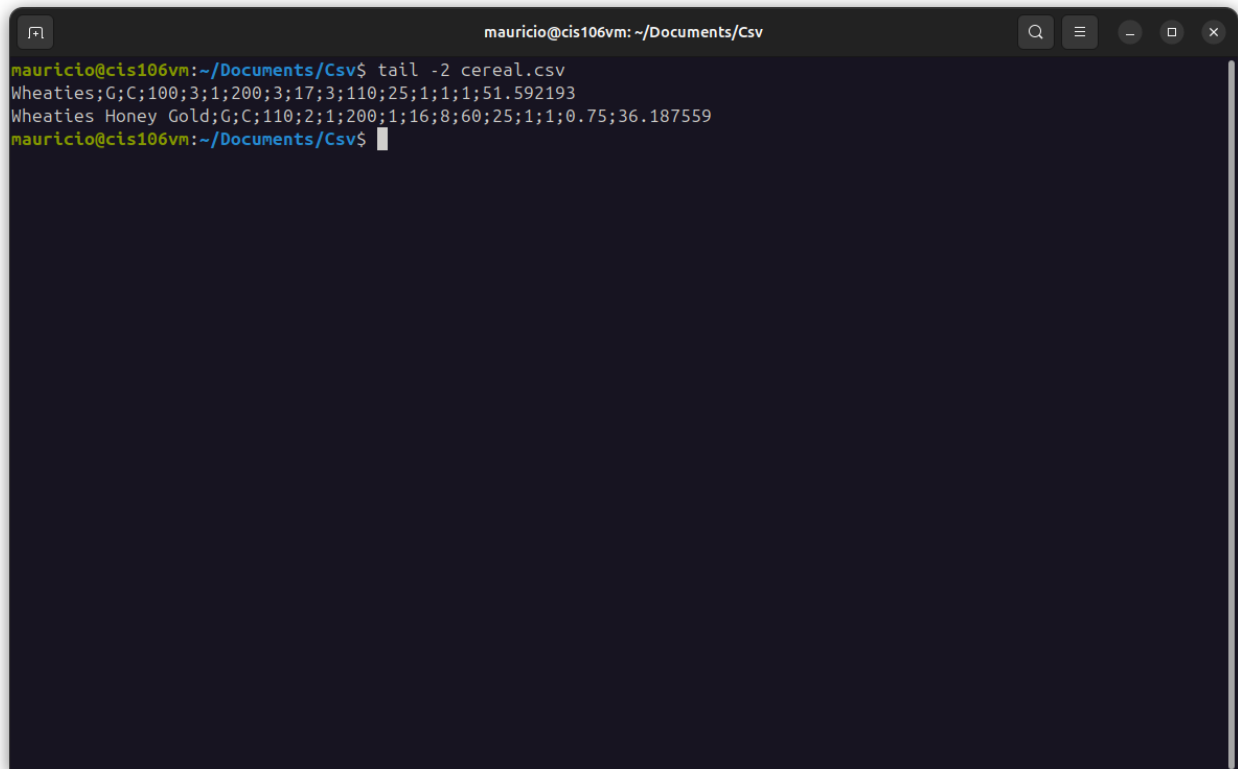
3. Content of `cereal.csv` with line numbers, showing non-printable characters and the \$ sign at the end of each line:

```
mauricio@cis106vm: ~/Documents/Csv$ cat -nv cereal.csv
1 name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating^M$
2 String;Categorical;Categorical;Int;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float^M$
3 100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973^M$
4 100% Natural Bran;Q;C;120;3;5;15;2;8;135;0;3;1;1;33.983679^M$
5 All-Bran;K;C;70;4;1;260;9;7;5;320;25;3;1;0.33;59.425505^M$
6 All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.704912^M$
7 Almond Delight;R;C;110;2;2;200;1;14;8;-1;25;3;1;0.75;34.384843^M$
8 Apple Cinnamon Cheerios;G;C;110;2;2;180;1.5;10.5;10;70;25;1;1;0.75;29.509541^M$
9 Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094^M$
10 Basic 4;G;C;130;3;2;210;2;18;8;100;25;3;1.33;0.75;37.038562^M$
11 Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253^M$
12 Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813^M$
13 Cap'n Crunch;Q;C;120;1;2;220;0;12;12;35;25;2;1;0.75;18.042851^M$
14 Cheerios;G;C;110;6;2;290;2;17;1;105;25;1;1;1.25;50.764999^M$
15 Cinnamon Toast Crunch;G;C;120;1;3;210;0;13;9;45;25;2;1;0.75;19.823573^M$
16 Clusters;G;C;110;3;2;140;2;13;7;105;25;3;1;0.5;40.400208^M$
17 Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1;22.736446^M$
18 Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019^M$
19 Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324^M$
20 Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.782791^M$
21 Count Chocula;G;C;110;1;1;180;0;12;13;65;25;2;1;1;22.396513^M$
22 Cracklin' Oat Bran;K;C;110;3;3;140;4;10;7;160;25;3;1;0.5;40.448772^M$
23 Cream of Wheat (Quick);N;H;100;3;0;80;1;21;0;-1;0;2;1;1;64.533816^M$
24 Crispix;K;C;110;2;0;220;1;21;3;30;25;3;1;1;46.895644^M$
25 Crispy Wheat & Raisins;G;C;100;2;1;140;2;11;10;120;25;3;1;0.75;36.176196^M$
26 Double Chex;R;C;100;2;0;190;1;18;5;80;25;3;1;0.75;44.330856^M$
27 Froot Loops;K;C;110;2;1;125;1;11;13;30;25;2;1;1;32.207582^M$
28 Frosted Flakes;K;C;110;1;0;200;1;14;11;25;25;1;1;0.75;31.435973^M$
29 Frosted Mini-Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;58.345141^M$
30 Fruit & Fibre Dates, Walnuts, and Oats;P;C;120;3;2;160;5;12;10;200;25;3;1.25;0.67;40.917047^M$
```

4. Displaying the first 2 lines:

```
mauricio@cis106vm: ~/Documents/Csv$ head -2 cereal.csv
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;rating
String;Categorical;Categorical;Int;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float
mauricio@cis106vm:~/Documents/Csv$
```

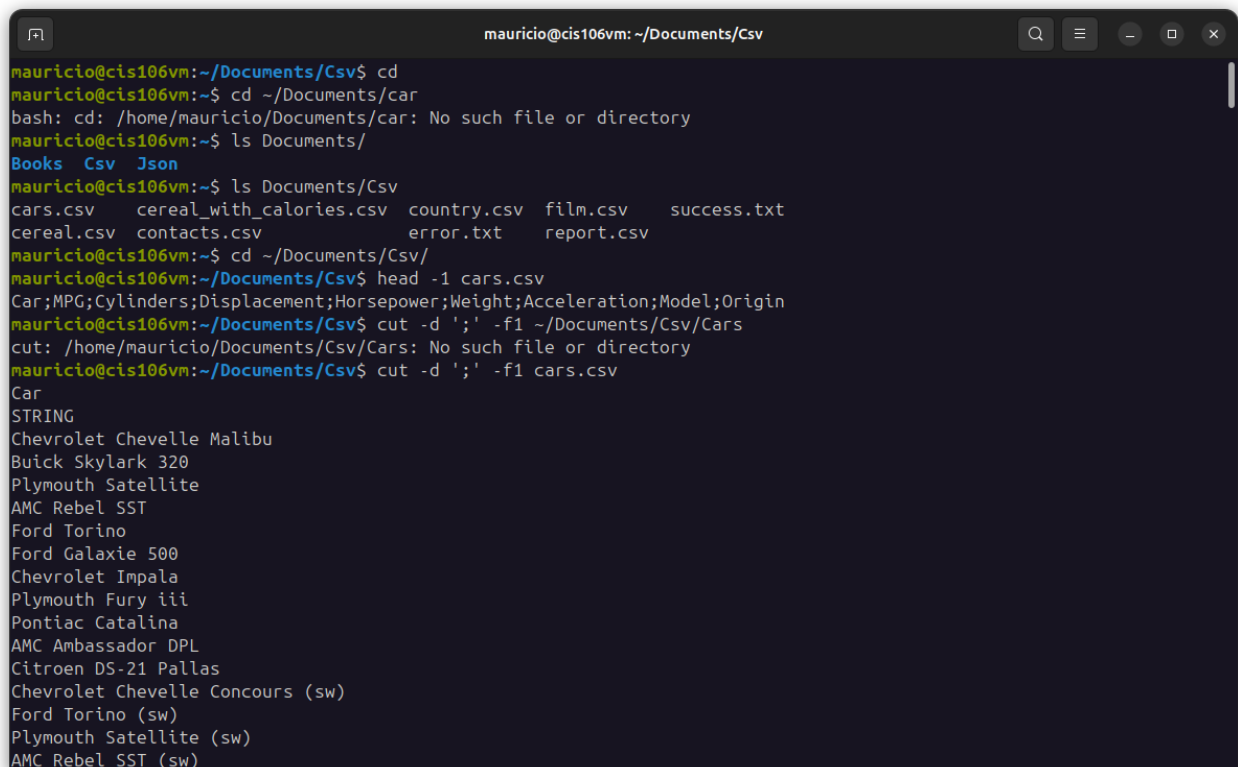
5. Displaying the last 2 lines:



```
mauricio@cis106vm: ~/Documents/Csv
mauricio@cis106vm:~/Documents/Csv$ tail -2 cereal.csv
Wheaties;G;C;100;3;1;200;3;17;3;110;25;1;1;1;51.592193
Wheaties Honey Gold;G;C;110;2;1;200;1;16;8;60;25;1;1;0.75;36.187559
mauricio@cis106vm:~/Documents/Csv$
```

Question 2: cut and sort

1. Display the first field of `cars.csv` file:



```
mauricio@cis106vm: ~/Documents/Csv
mauricio@cis106vm:~/Documents/Csv$ cd
mauricio@cis106vm:~$ cd ~/Documents/car
bash: cd: /home/mauricio/Documents/car: No such file or directory
mauricio@cis106vm:~$ ls Documents/
Books  Csv  Json
mauricio@cis106vm:~$ ls Documents/Csv
cars.csv  cereal_with_calories.csv  country.csv  film.csv  success.txt
cereal.csv  contacts.csv              error.txt    report.csv
mauricio@cis106vm:~$ cd ~/Documents/Csv/
mauricio@cis106vm:~/Documents/Csv$ head -1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
mauricio@cis106vm:~/Documents/Csv$ cut -d ';' -f1 ~/Documents/Csv/Cars
cut: /home/mauricio/Documents/Csv/Cars: No such file or directory
mauricio@cis106vm:~/Documents/Csv$ cut -d ';' -f1 cars.csv
Car
STRING
Chevrolet Chevelle Malibu
Buick Skylark 320
Plymouth Satellite
AMC Rebel SST
Ford Torino
Ford Galaxie 500
Chevrolet Impala
Plymouth Fury iii
Pontiac Catalina
AMC Ambassador DPL
Citroen DS-21 Pallas
Chevrolet Chevelle Concours (sw)
Ford Torino (sw)
Plymouth Satellite (sw)
AMC Rebel SST (sw)
```

2. Display the first and the 3rd field of the `cars.csv` file:

```
mauricio@cis106vm: ~/Documents/Csv
mauricio@cis106vm:~/Documents/Csv$ cut -d ';' -f1,3 cars.csv
Car;Cylinders
STRING;INT
Chevrolet Chevelle Malibu;8
Buick Skylark 320;8
Plymouth Satellite;8
AMC Rebel SST;8
Ford Torino;8
Ford Galaxie 500;8
Chevrolet Impala;8
Plymouth Fury iii;8
Pontiac Catalina;8
AMC Ambassador DPL;8
Citroen DS-21 Pallas;4
Chevrolet Chevelle Concours (sw);8
Ford Torino (sw);8
Plymouth Satellite (sw);8
AMC Rebel SST (sw);8
Dodge Challenger SE;8
Plymouth 'Cuda 340;8
Ford Mustang Boss 302;8
Chevrolet Monte Carlo;8
Buick Estate Wagon (sw);8
Toyota Corolla Mark ii;4
Plymouth Duster;6
AMC Hornet;6
Ford Maverick;6
Datsun PL510;4
Volkswagen 1131 Deluxe Sedan;4
Peugeot 504;4
Audi 100 LS;4
```

3. Repeat the previous command but replace the delimiter with an equal sign and 2 spaces:

```
mauricio@cis106vm: ~/Documents/Csv
mauricio@cis106vm:~/Documents/Csv$ cut -d '( = )' -f1,3 cars.csv
bash: syntax error near unexpected token `('
mauricio@cis106vm:~/Documents/Csv$ cut -d ';' '( = ) cars.csv
bash: syntax error near unexpected token `('
mauricio@cis106vm:~/Documents/Csv$ cut -d '( = )' -f1,3 cars.csv
cut: the delimiter must be a single character
Try 'cut --help' for more information.
mauricio@cis106vm:~/Documents/Csv$ cut '( = ) ':' -f1,3 cars.csv
bash: syntax error near unexpected token `='
mauricio@cis106vm:~/Documents/Csv$ cut -d '( = )' -f1,3 cars.csv
cut: the delimiter must be a single character
Try 'cut --help' for more information.
mauricio@cis106vm:~/Documents/Csv$
```

4. Sort the `cars.csv` file:

```
mauricio@cis106vm: ~/Documents/Csv$ sort cars.csv
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
```

5. Sort the `cereal.csv` file by **Calories**:

```
mauricio@cis106vm: ~/Documents/Csv$ sort -t";" -k4 cereal.csv
Double Chex;R;C;100;2;0;190;1;18;5;80;25;3;1;0.75;44.330856
Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324
Golden Crisp;P;C;100;2;0;45;0;11;15;40;25;1;1;0.88;35.252444
Crispy Wheat & Raisins;G;C;100;2;1;140;2;11;10;120;25;3;1;0.75;36.176196
Multi-Grain Cheerios;G;C;100;2;1;220;2;15;6;90;25;1;1;1;40.105965
Frosted Mini-Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;58.345141
Product 19;K;C;100;3;0;320;1;20;3;45;100;3;1;1;41.503540
Cream of Wheat (Quick);N;H;100;3;0;80;1;21;0;-1;0;2;1;1;64.533816
Grape Nuts Flakes;P;C;100;3;1;140;3;15;5;85;25;3;1;0.88;52.076897
Total Whole Grain;G;C;100;3;1;200;3;16;3;110;100;3;1;1;46.658844
Wheaties;G;C;100;3;1;200;3;17;3;110;25;1;1;1;51.592193
Wheat Chex;R;C;100;3;1;230;3;17;3;115;25;1;1;0.67;49.787445
Raisin Nut Bran;G;C;100;3;2;140;2;5;10.5;8;140;25;3;1;0.5;39.703400
Maypo;A;H;100;4;1;0;16;3;95;25;2;1;1;54.850917
Quaker Oat Squares;Q;C;100;4;1;135;2;14;6;110;25;3;1;0.5;49.511874
Life;Q;C;100;4;2;150;2;12;6;95;25;2;1;0.67;45.328074
Quaker Oatmeal;Q;H;100;5;2;0;2.7;-1;-1;110;0;1;1;0.67;50.828392
Honey-comb;P;C;110;1;0;180;0;14;11;35;25;1;1;1.33;28.742414
Frosted Flakes;K;C;110;1;0;200;1;14;11;25;25;1;1;0.75;31.435973
Rice Chex;R;C;110;1;0;240;0;23;2;30;25;1;1;1.13;41.998933
Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.782791
Fruity Pebbles;P;C;110;1;1;135;0;13;12;25;25;2;1;0.75;28.025765
Trix;G;C;110;1;1;140;0;13;12;25;25;2;1;1;27.753301
Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1;22.736446
Count Chocula;G;C;110;1;1;180;0;12;13;65;25;2;1;1;22.396513
Golden Grahams;G;C;110;1;1;280;0;15;9;45;25;2;1;0.75;23.804043
Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094
Crispix;K;C;110;2;0;220;1;21;3;30;25;3;1;1;46.895644
Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019
Rice Krispies;K;C;110;2;0;290;0;22;3;35;25;1;1;1;40.560159
Froot Loops;K;C;110;2;1;125;1;11;13;30;25;2;1;1;32.207582
```

Question 3: grep

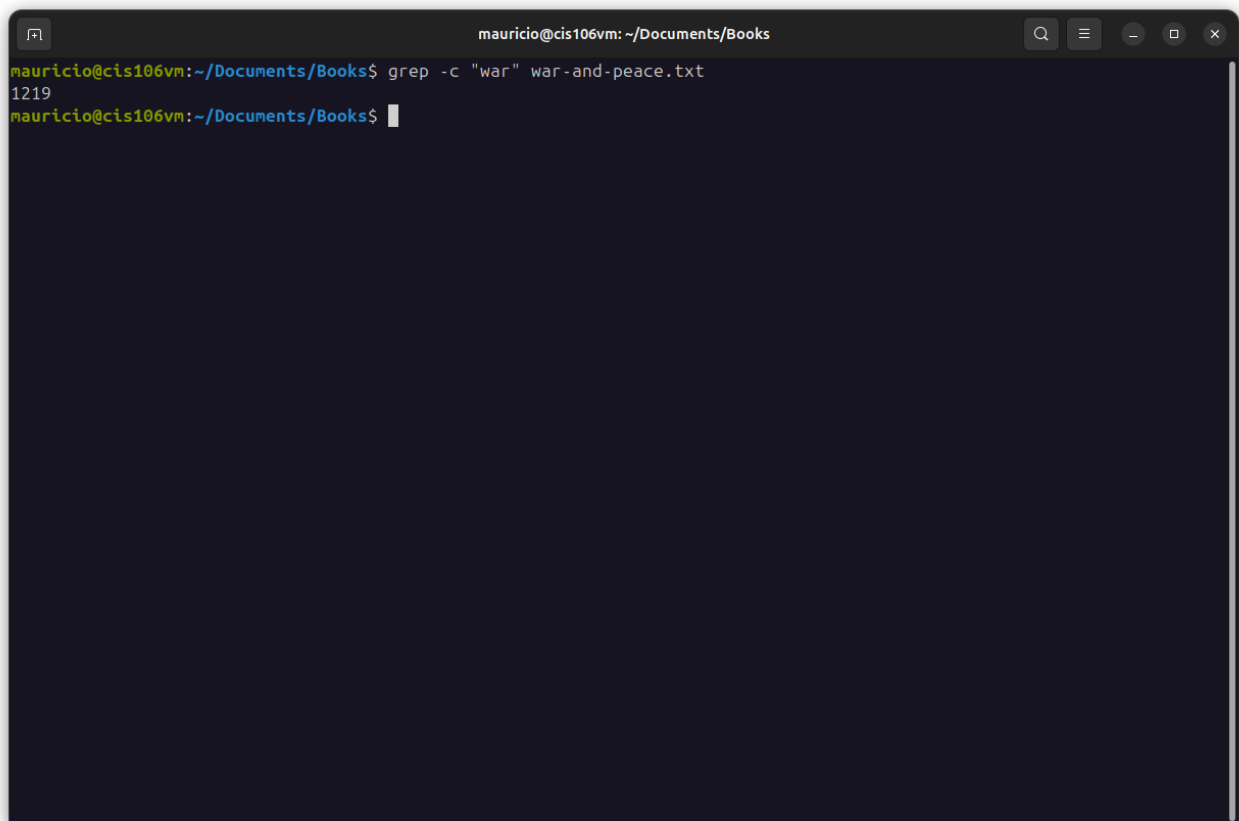
1. Display every line that contains the word "war" in the book `war and peace`:

```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -n "War" war-and-peace.txt
1:The Project Gutenberg eBook of War and Peace, by Leo Tolstoy
11:Title: War and Peace
8967:the Minister of War."
8970:in to the Minister of War. Five minutes later he returned and bowing
8972:corridor to the cabinet where the Minister of War was at work. The
8983:narrowed disdainfully, he entered the room of the Minister of War with
8996:interested the Minister of War less than any of the other matters he was
9035:indifferent hands of the Minister of War and the polite adjutant. The
9111:engagement and his reception by the Minister of War.
9155:the Minister of War but also his Most August Majesty the Emperor and
9170:invincibility of the French, and the Minister of War does not even care
9296:to the Emperor Francis; he remembered the Minister of War, the polite
9477:his own house. The Minister of War came up and congratulated him on the
9687:That same night, having taken leave of the Minister of War, Bolkónski
17264:Austrian Council of War at which Suvórov crowed like a cock in reply to
23327:Warmed by the spring sunshine he sat in the calèche looking at the new
23655:Minister of War, Count Arakchéev.
23664:"He is Minister of War, a man trusted by the Emperor, and I need not
23735:of War needlessly deviating."
23796:War's anteroom).
32240:which would take them to the Warsaw highroad, and from there they would
34591:the good of that? War is my profession, but his business is to reign
34629:the Minister of War and went to join the army in Moldavia. While in
34916:of War; Count Bennigsen, the senior general in rank; the Grand Duke
42558:without knowing why. War is not courtesy but the most horrible thing in
45297:The Council of War began to assemble at two in the afternoon in the
49519:than that. We took Vienna, Berlin, Madrid, Naples, Rome, Warsaw, all
50918:"The path to Warsaw, perhaps," Prince Hippolyte remarked loudly and
59566:had first wanted to effect a diversion in Greece and then in Warsaw but
mauricio@cis106vm:~/Documents/Books$
```

2. Repeat the previous command with case sensitivity disabled:

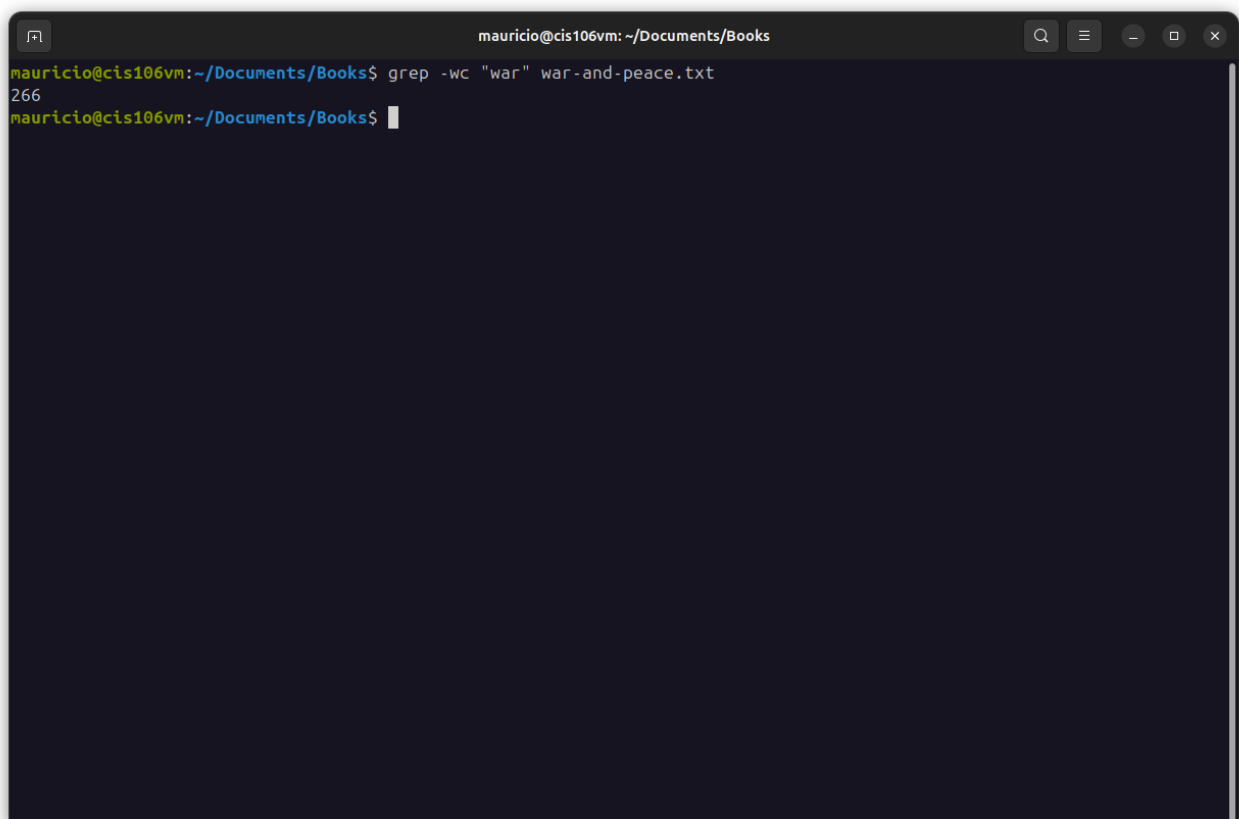
```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -in "War" war-and-peace.txt
1:The Project Gutenberg eBook of War and Peace, by Leo Tolstoy
11:Title: War and Peace
26:*** START OF THE PROJECT GUTENBERG EBOOK WAR AND PEACE ***
31:WAR AND PEACE
837:Buonapartes. But I warn you, if you don't tell me that this means war,
912:things, but Austria never has wished, and does not wish, for war. She
1051:Pávlovna's hand and for some reason drawing it downwards. "Arrange
1134:to get himself killed. Tell me what this wretched war is for?" she
1266:she moved toward Anna Pávlovna. Hélène was so lovely that not only
1402:"You are off to the war, Prince?" said Anna Pávlovna.
1581:    * God has given it to me, let him who touches it beware!
1590:more animated. "And believe me, they are reaping the reward of their
1597:through his lorgnette, suddenly turned completely round toward the
1773:Prince Andrew, who had evidently wished to tone down the awkwardness of
1833:his kindly, simple, and modest expression. Anna Pávlovna turned toward
1880:awkwardness or intentionally (no one could have said which) after the
1971:to tell you. There is a war now against Napoleon. If it were a war for
1982:wars," he said.
1990:"Well, why are you going to the war?" asked Pierre.
2016:wants to go to the war," replied Pierre, addressing the princess
2025:without wars. How is it that we women don't want anything of the kind,
2088:so to me? What have I done to you? You are going to the war and have no
2186:he worked went step by step toward his goal. He was free, he had nothing
2191:the enchanted circle I cannot escape from. I am now going to the war,
2192:the greatest war there ever was, and I know nothing and am fit for
2441:lad jumped awkwardly back into the room, tripping over his spurs.
2452:present, suddenly pushed forward with a scared and angry look and wanted
2486:Suddenly Dólokhov made a backward movement with his spine, and his arm
2492:aware of a stir all around. He looked up: Dólokhov was standing on the
2583:still in the drawing room, drew a chair toward him or her, and jauntily
2760:bodice, with black curls tossed backward, thin bare arms, little legs
2860:"But they say that war has been declared," replied the visitor.
```

3. Repeat the previous command but this time it only displays the total number of lines that contain the word "war":



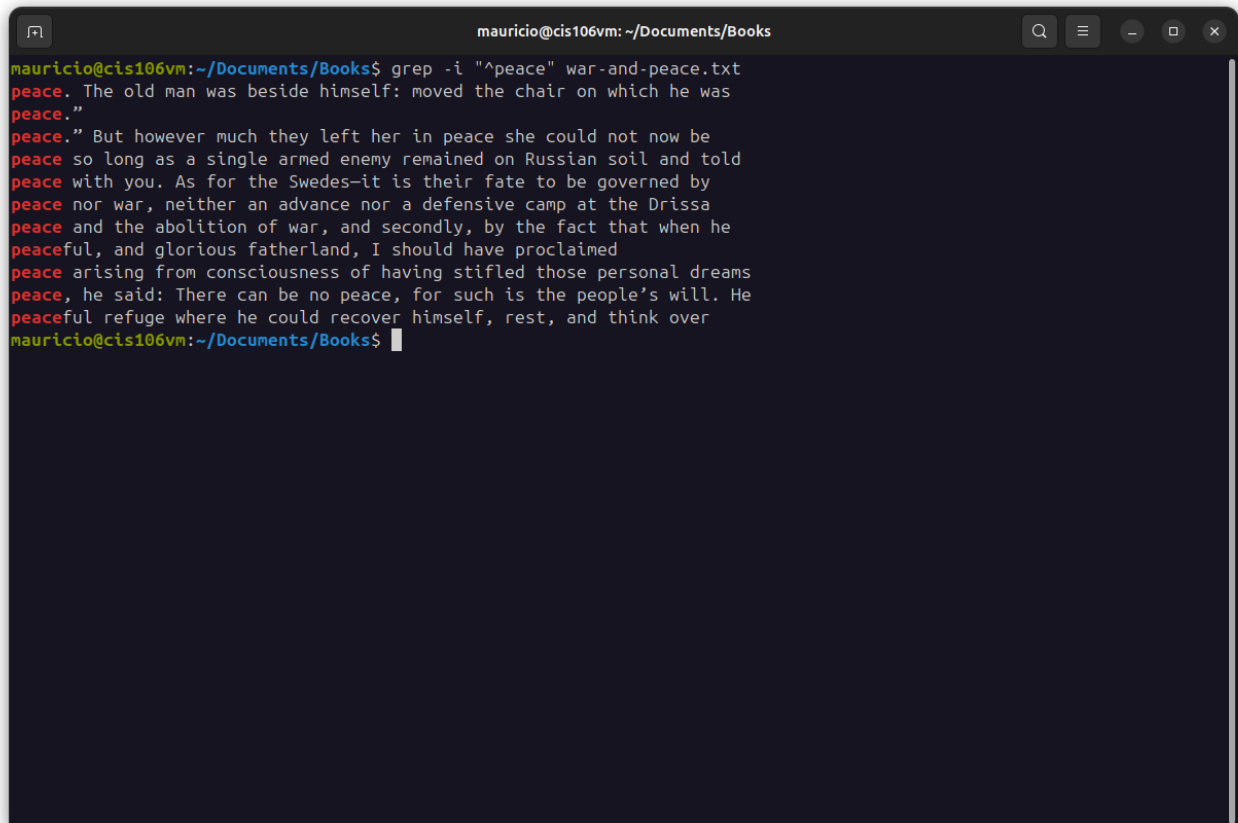
```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -c "war" war-and-peace.txt
1219
mauricio@cis106vm:~/Documents/Books$
```

4. Matching **Only** the word WAR:



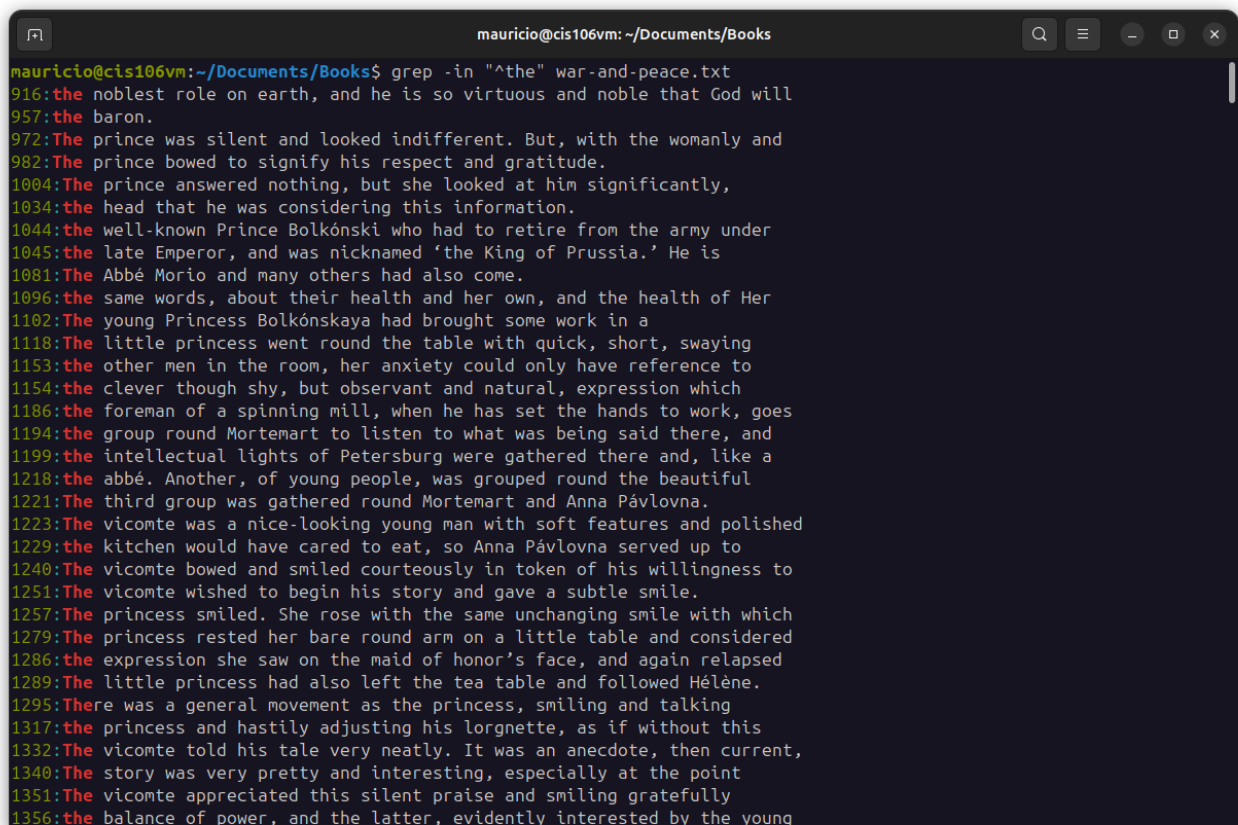
```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -wc "war" war-and-peace.txt
266
mauricio@cis106vm:~/Documents/Books$
```

5. Displays every line that starts with the word "peace":



```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -i "^peace" war-and-peace.txt
peace. The old man was beside himself: moved the chair on which he was
peace."
peace." But however much they left her in peace she could not now be
peace so long as a single armed enemy remained on Russian soil and told
peace with you. As for the Swedes—it is their fate to be governed by
peace nor war, neither an advance nor a defensive camp at the Drissa
peace and the abolition of war, and secondly, by the fact that when he
peaceful, and glorious fatherland, I should have proclaimed
peace arising from consciousness of having stifled those personal dreams
peace, he said: There can be no peace, for such is the people's will. He
peaceful refuge where he could recover himself, rest, and think over
mauricio@cis106vm:~/Documents/Books$
```

6. Display every line that contains the word **the**:



```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -in "^the" war-and-peace.txt
916:the noblest role on earth, and he is so virtuous and noble that God will
957:the baron.
972:The prince was silent and looked indifferent. But, with the womanly and
982:The prince bowed to signify his respect and gratitude.
1004:The prince answered nothing, but she looked at him significantly,
1034:the head that he was considering this information.
1044:the well-known Prince Bolκόnski who had to retire from the army under
1045:the late Emperor, and was nicknamed 'the King of Prussia.' He is
1081:The Abbé Morio and many others had also come.
1096:the same words, about their health and her own, and the health of Her
1102:The young Princess Bolκόnskaya had brought some work in a
1118:The little princess went round the table with quick, short, swaying
1153:the other men in the room, her anxiety could only have reference to
1154:the clever though shy, but observant and natural, expression which
1186:the foreman of a spinning mill, when he has set the hands to work, goes
1194:the group round Mortemart to listen to what was being said there, and
1199:the intellectual lights of Petersburg were gathered there and, like a
1218:the abbé. Another, of young people, was grouped round the beautiful
1221:The third group was gathered round Mortemart and Anna Pávlovna.
1223:The vicomte was a nice-looking young man with soft features and polished
1229:the kitchen would have cared to eat, so Anna Pávlovna served up to
1240:The vicomte bowed and smiled courteously in token of his willingness to
1251:The vicomte wished to begin his story and gave a subtle smile.
1257:The princess smiled. She rose with the same unchanging smile with which
1279:The princess rested her bare round arm on a little table and considered
1286:the expression she saw on the maid of honor's face, and again relapsed
1289:The little princess had also left the tea table and followed Hélène.
1295:There was a general movement as the princess, smiling and talking
1317:the princess and hastily adjusting his lorgnette, as if without this
1332:The vicomte told his tale very neatly. It was an anecdote, then current,
1340:The story was very pretty and interesting, especially at the point
1351:The vicomte appreciated this silent praise and smiling gratefully
1356:the balance of power, and the latter, evidently interested by the young
```


7. Display every line that contains the word **love** in every book file:

```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -nro "love" ~/Documents/Books/
/home/mauricio/Documents/Books/great-expectations.txt:1672:Love
/home/mauricio/Documents/Books/great-expectations.txt:1673:Love
/home/mauricio/Documents/Books/great-expectations.txt:2366:Love
/home/mauricio/Documents/Books/great-expectations.txt:3379:Love
/home/mauricio/Documents/Books/great-expectations.txt:3628:Love
/home/mauricio/Documents/Books/great-expectations.txt:3671:Love
/home/mauricio/Documents/Books/great-expectations.txt:3680:Love
/home/mauricio/Documents/Books/great-expectations.txt:3706:Love
/home/mauricio/Documents/Books/great-expectations.txt:5317:Love
/home/mauricio/Documents/Books/great-expectations.txt:5474:Love
/home/mauricio/Documents/Books/great-expectations.txt:6605:Love
/home/mauricio/Documents/Books/great-expectations.txt:7563:Love
/home/mauricio/Documents/Books/great-expectations.txt:7576:Love
/home/mauricio/Documents/Books/great-expectations.txt:7582:Love
/home/mauricio/Documents/Books/great-expectations.txt:7988:Love
/home/mauricio/Documents/Books/great-expectations.txt:8521:Love
/home/mauricio/Documents/Books/great-expectations.txt:8594:Love
/home/mauricio/Documents/Books/great-expectations.txt:9111:Love
/home/mauricio/Documents/Books/great-expectations.txt:9720:Love
/home/mauricio/Documents/Books/great-expectations.txt:9721:Love
/home/mauricio/Documents/Books/great-expectations.txt:9721:Love
/home/mauricio/Documents/Books/great-expectations.txt:9723:Love
/home/mauricio/Documents/Books/great-expectations.txt:9726:Love
/home/mauricio/Documents/Books/great-expectations.txt:9784:Love
/home/mauricio/Documents/Books/great-expectations.txt:10070:Love
/home/mauricio/Documents/Books/great-expectations.txt:10070:Love
/home/mauricio/Documents/Books/great-expectations.txt:10070:Love
/home/mauricio/Documents/Books/great-expectations.txt:10074:Love
/home/mauricio/Documents/Books/great-expectations.txt:10074:Love
/home/mauricio/Documents/Books/great-expectations.txt:10074:Love
/home/mauricio/Documents/Books/great-expectations.txt:10075:Love
```

8. Any 5 letter word that contains l and d in every book file:

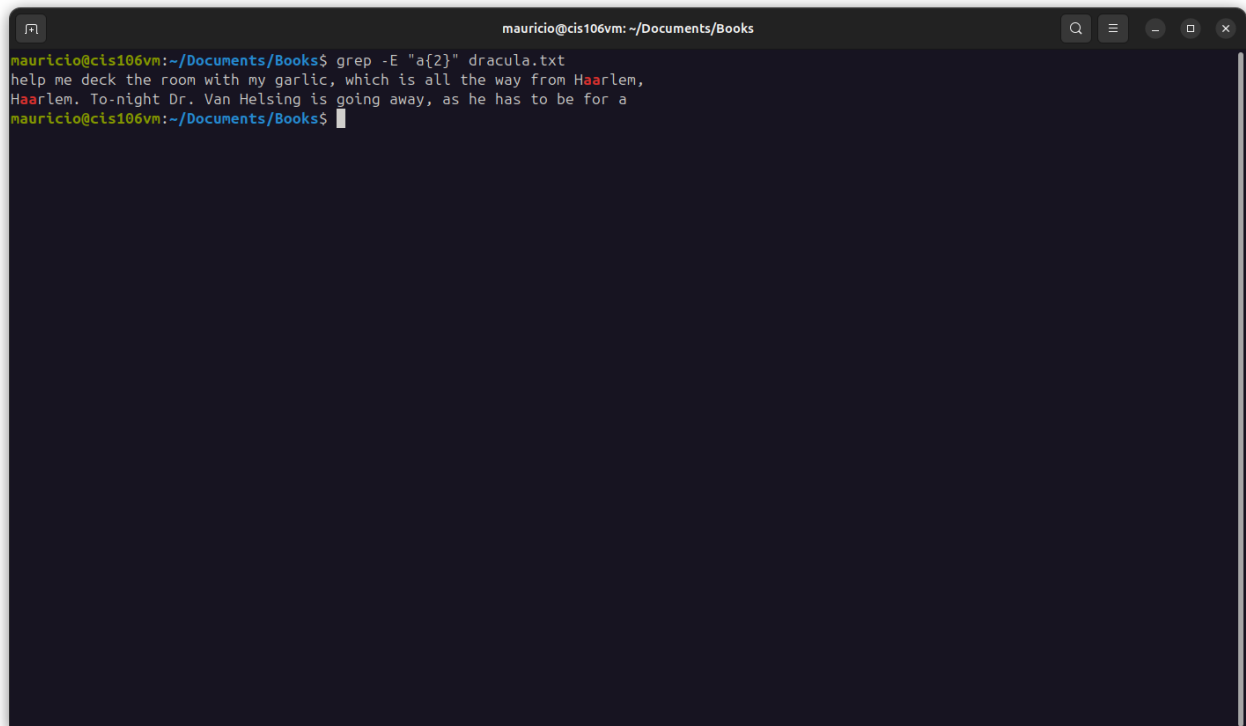
```
mauricio@cis106vm:~/Documents/Books$ grep -nR '\l...d' ~/Documents/Books/
/home/mauricio/Documents/Books/great-expectations.txt:129:Lamed by stones, and cut by flints, and stung by nettles, and torn by
/home/mauricio/Documents/Books/great-expectations.txt:1672:Loved Joe,—perhaps for no better reason in those early days than
/home/mauricio/Documents/Books/great-expectations.txt:2117:lived in a large and dismal house barricaded against robbers, and who
/home/mauricio/Documents/Books/great-expectations.txt:3085:liked sometimes to smoke his pipe there. I had received strict orders
/home/mauricio/Documents/Books/great-expectations.txt:9726:Loved her none the less because I knew it, and it had no more influence
/home/mauricio/Documents/Books/great-expectations.txt:14015:laundress or her niece, he was to keep himself out of their view until
/home/mauricio/Documents/Books/great-expectations.txt:14303:lived, before going up the stairs, Garden Court was as still and
/home/mauricio/Documents/Books/great-expectations.txt:14615:lived at the top of Compeyson's house (over nigh Brentford it was), and
/home/mauricio/Documents/Books/great-expectations.txt:16596:lived in the supplementary house across the back courtyard, opened the
/home/mauricio/Documents/Books/great-expectations.txt:16945:liked about informing the rest. This I did next day, through Herbert,
/home/mauricio/Documents/Books/great-expectations.txt:17753:lay directly in my way, and had been worked that day, as I saw by the
/home/mauricio/Documents/Books/dracula.txt:5597:Lay down, and when I went over to Bersicker he let me stroke his ears
/home/mauricio/Documents/Books/dracula.txt:9540:Loved and honoured as our host is, everything regarding him is of
/home/mauricio/Documents/Books/dracula.txt:14713:Loved him and honoured him more than I can say, and that my latest and
/home/mauricio/Documents/Books/dracula.txt:15427:Loved her, that they did dare much for her sake."
/home/mauricio/Documents/Books/pride-and-prejudice.txt:1720:liked a red coat myself very well--and, indeed, so I do still at my
/home/mauricio/Documents/Books/pride-and-prejudice.txt:9474:lived. Not like the wild young men now-a-days, who think of nothing but
/home/mauricio/Documents/Books/pride-and-prejudice.txt:10016:Loved her, but for loving her still well enough to forgive all the
/home/mauricio/Documents/Books/pride-and-prejudice.txt:13948:liked him but Jane; and even feared that with the others it was a
/home/mauricio/Documents/Books/war-and-peace.txt:5254:liked to. He looked inquiringly at his mistress and saw that she was
/home/mauricio/Documents/Books/war-and-peace.txt:7296:liked to tell him. He gathered up the papers and with a bow to both,
/home/mauricio/Documents/Books/war-and-peace.txt:12933:liked to repeat to herself. It was the story of a girl who had been
/home/mauricio/Documents/Books/war-and-peace.txt:13034:Loved more than himself. He kept telling himself that he would consider
/home/mauricio/Documents/Books/war-and-peace.txt:13817:liked to help young men, was flattered by being asked for his assistance
/home/mauricio/Documents/Books/war-and-peace.txt:21373:lived for glory.—And after all what is glory? The same love of others,
/home/mauricio/Documents/Books/war-and-peace.txt:21375:lived for others, and not almost, but quite, ruined my life. And I have
/home/mauricio/Documents/Books/war-and-peace.txt:22829:Lie down in my room and have a rest."
/home/mauricio/Documents/Books/war-and-peace.txt:23565:lived for myself alone while others live so apart from it, but so that
/home/mauricio/Documents/Books/war-and-peace.txt:25906:liked her voice. She asked this and then became confused, feeling that
/home/mauricio/Documents/Books/war-and-peace.txt:25908:liked her singing as he liked everything she did.
/home/mauricio/Documents/Books/war-and-peace.txt:26188:Loved.) "I... but no, I will talk to you later on," and with a
/home/mauricio/Documents/Books/war-and-peace.txt:26971:Loved his wife, she died, but that was not enough: he wanted to bind
```

9. Any 4 letter word that starts with d, contains a vowel after d and has 3 more characters in every book file:

```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -nR 'd[aeiou]..' ~/Documents/Books/
```

```
mauricio@cis106vm: ~/Documents/Books
/home/mauricio/Documents/Books/war-and-peace.txt:37652:him. He wrote to Arakchéev, the Emperor's confidant: "It must be as
/home/mauricio/Documents/Books/war-and-peace.txt:37658:that I am serving Barclay. I confess I do not want to."
/home/mauricio/Documents/Books/war-and-peace.txt:37660:The swarm of Bronnitskis and Wintzingerodes and their like still further
/home/mauricio/Documents/Books/war-and-peace.txt:37661:embittered the relations between the commanders in chief, and even
/home/mauricio/Documents/Books/war-and-peace.txt:37662:less unity resulted. Preparations were made to fight the French before
/home/mauricio/Documents/Books/war-and-peace.txt:37664:hating Barclay, rode to visit a friend of his own, a corps commander,
/home/mauricio/Documents/Books/war-and-peace.txt:37665:and, having spent the day with him, returned to Barclay and condemned,
/home/mauricio/Documents/Books/war-and-peace.txt:37669:While disputes and intrigues were going on about the future field of
/home/mauricio/Documents/Books/war-and-peace.txt:37671:them—the French stumbled upon Nevérovski's division and reached the
/home/mauricio/Documents/Books/war-and-peace.txt:37676:on both sides.
/home/mauricio/Documents/Books/war-and-peace.txt:37678:Smolénsk was abandoned contrary to the wishes of the Emperor and of the
/home/mauricio/Documents/Books/war-and-peace.txt:37683:retired, thus arriving at the very result which caused his destruction.
/home/mauricio/Documents/Books/war-and-peace.txt:37691:The day after his son had left, Prince Nicholas sent for Princess Mary
/home/mauricio/Documents/Books/war-and-peace.txt:37694:"Well? Are you satisfied now?" said he. "You've made me quarrel with my
/home/mauricio/Documents/Books/war-and-peace.txt:37699:After that Princess Mary did not see her father for a whole week. He was
/home/mauricio/Documents/Books/war-and-peace.txt:37700:ill and did not leave his study.
/home/mauricio/Documents/Books/war-and-peace.txt:37702:Princess Mary noticed to her surprise that during this illness the
/home/mauricio/Documents/Books/war-and-peace.txt:37703:old prince not only excluded her from his room, but did not admit
/home/mauricio/Documents/Books/war-and-peace.txt:37704:Mademoiselle Bourienne either. Tikhon alone attended him.
/home/mauricio/Documents/Books/war-and-peace.txt:37707:of life, devoting himself with special activity to building operations
/home/mauricio/Documents/Books/war-and-peace.txt:37708:and the arrangement of the gardens and completely breaking off his
/home/mauricio/Documents/Books/war-and-peace.txt:37709:relations with Mademoiselle Bourienne. His looks and cold tone to his
/home/mauricio/Documents/Books/war-and-peace.txt:37710:daughter seemed to say: "There, you see? You plotted against me, you
/home/mauricio/Documents/Books/war-and-peace.txt:37714:Princess Mary spent half of every day with little Nicholas, watching
/home/mauricio/Documents/Books/war-and-peace.txt:37716:Dessalles; the rest of the day she spent over her books, with her old
/home/mauricio/Documents/Books/war-and-peace.txt:37717:nurse, or with "God's folk" who sometimes came by the back door to see
/home/mauricio/Documents/Books/war-and-peace.txt:37720:Of the war Princess Mary thought as women do think about wars. She
/home/mauricio/Documents/Books/war-and-peace.txt:37722:the strange cruelty that impels men to kill one another, but she did not
/home/mauricio/Documents/Books/war-and-peace.txt:37723:understand the significance of this war, which seemed to her like all
/home/mauricio/Documents/Books/war-and-peace.txt:37724:previous wars. She did not realize the significance of this war, though
/home/mauricio/Documents/Books/war-and-peace.txt:37730:correspondence with her, wrote patriotic letters from Moscow.
/home/mauricio/Documents/Books/war-and-peace.txt:37733:Russian, "because I have a detestation for all the French, and the
/home/mauricio/Documents/Books/war-and-peace.txt:37735:Moscow are elated by enthusiasm for our adored Emperor.
/home/mauricio/Documents/Books/war-and-peace.txt:37737:"My poor husband is enduring pains and hunger in Jewish taverns, but the
/home/mauricio/Documents/Books/war-and-peace.txt:37744:princesses Aline and Sophie sit whole days with me, and we, unhappy
```

10. Search for every word that contains 2 repeated **a** in the book **dracula**:



```
mauricio@cis106vm: ~/Documents/Books
mauricio@cis106vm:~/Documents/Books$ grep -E "a{2}" dracula.txt
help me deck the room with my garlic, which is all the way from Haarlem,
Haarlem. To-night Dr. Van Helsing is going away, as he has to be for a
mauricio@cis106vm:~/Documents/Books$
```
