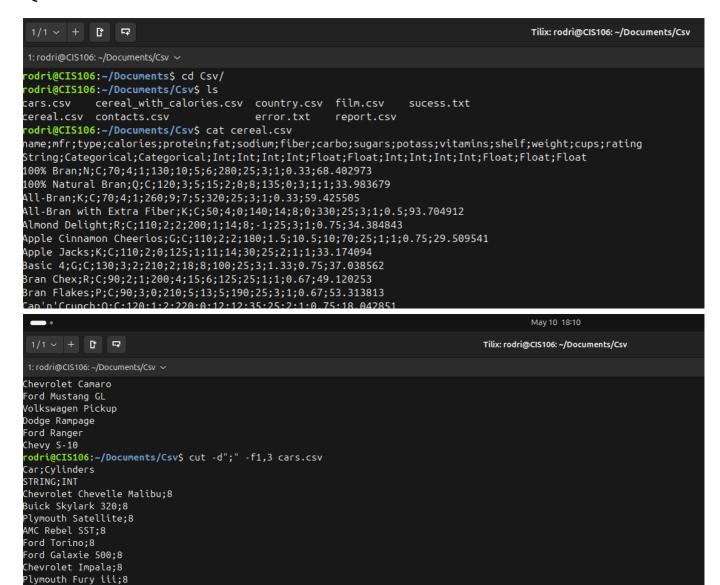
Lab 7

Question 1



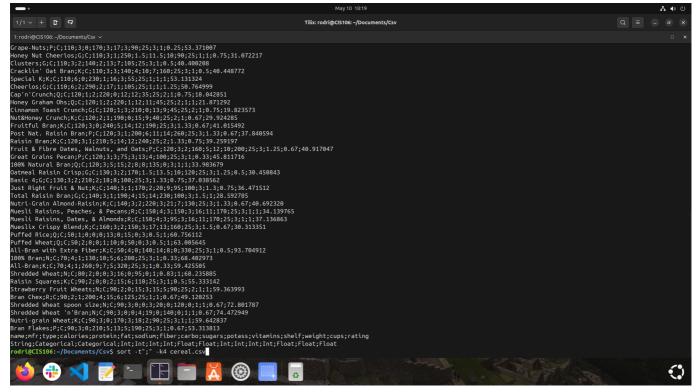
```
String;Categorical;Categorical;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating
odri@CIS106:~/Documents/Csv$ cat -nEv cereal.csv
    1 name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating^M$
    2 String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;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$
       100% Natural Bran;Q;C;120;3;5;15;2;8;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$
       Almond Delight;R;C;110;2;2;200;1;14;8;-1;25;3;1;0.75;34.384843^M$
       Apple Cinnamon Cheerios; G; C; 110; 2; 2; 180; 1.5; 10.5; 10; 70; 25; 1; 1; 0.75; 29.509541^M$
 1/1 ∨ + 🗗 🖙
                                                                                     Tilix: rodri@CIS106: ~/Documents/Csv
1: rodri@CIS106: ~/Documents/Csv ~
rodri@CIS106:~/Documents/Csv$ head -n 2 cereal.csv
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
odri@CIS106:~/Documents/Csv$ tail -n 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;<mark>1</mark>;200;1;16;8;60;25;1;1;0.75;36.187559
rodri@CIS106:~/Documents/Csv$
```

Question 2

```
May 10 18:09
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                                                                                    Tilix: rodri@CIS106: ~/Documents/Csv
 1: rodri@CIS106: ~/Documents/Csv ~
rodri@CIS106:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
rodri@CIS106:~/Documents/Csv$ cut -d";" -f1 cars.csv
Car
STRING
Chevrolet Chevelle Malibu
Buick Skylark 320
Plymouth Satellite
AMC Rebel SST
Ford Torino
                                                                                               May 10 18:10
 1/1 ∨ + 🗗 🖙
                                                                                      Tilix: rodri@CIS106: ~/Documents/Csv
 1: rodri@CIS106: ~/Documents/Csv ~
Chevrolet Camaro
Ford Mustang GL
Volkswagen Pickup
Dodge Rampage
Ford Ranger
Chevy S-10
rodri@CIS106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv
ar;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
Chevrolet Camaro = 4
Ford Mustang GL = 4
Volkswagen Pickup = 4
Dodge Rampage = 4
Ford Ranger = 4
Chevy S-10 = 4
```

rodri@CIS106:~/Documents/Csv\$ cut -d";" -f1,3 cars.csv --output-delimiter=" = "

```
Volkswagen Scirocco;31.5;4;89.00;71.00;1990.;14.9;78;Europe
Volkswagen Super Beetle 117;0;4;97.00;48.00;1978.;20.0;71;Europe
Volkswagen Super Beetle;26.0;4;97.00;46.00;1950.;21.0;73;Europe
Volkswagen Type 3;23.0;4;97.00;54.00;2254.;23.5;72;Europe
Volvo 144ea;19.0;4;121.0;112.0;2868.;15.5;73;Europe
Volvo 145e (sw);18.0;4;121.0;112.0;2933.;14.5;72;Europe
Volvo 244DL;22.0;4;121.0;98.00;2945.;14.5;75;Europe
Volvo 245;20.0;4;130.0;102.0;3150.;15.7;76;Europe
Volvo 264gl;17.0;6;163.0;125.0;3140.;13.6;78;Europe
Volvo Diesel;30.7;6;145.0;76.00;3160.;19.6;81;Europe
rodri@CIS106:~/Documents/Csv$ sort cars.csv
```



Question 3

rodri@CIS106:~/Documents/Books\$ grep "War" war-and-peace.txt The Project Gutenberg eBook of War and Peace, by Leo Tolstoy Title: War and Peace the Minister of War. in to the Minister of War. Five minutes later he returned and bowing corridor to the cabinet where the Minister of War was at work. The narrowed disdainfully, he entered the room of the Minister of M interested the Minister of War less than any of the other matters he was indifferent hands of the Minister of War and the polite adjutant. The engagement and his reception by the Minister of War. the Minister of War but also his Most August Majesty the Emperor and invincibility of the French, and the Minister of War does not even care to the Emperor Francis; he remembered the Minister of War, the polite his own house. The Minister of War came up and congratulated him on the That same night, having taken leave of the Minister of War, Bolkónski Austrian Council of War at which Suvórov crowed like a cock in reply to larmed by the spring sunshine he sat in the calèche looking at the new Minister of War, Count Arakchéev. "He is Minister of War, a man trusted by the Emperor, and I need not of War needlessly deviating." War's anteroom). which would take them to the Warsaw highroad, and from there they would the good of that? War is my profession, but his business is to reign the Minister of War and went to join the army in Moldavia. While in of War; Count Bennigsen, the senior general in rank; the Grand Duke without knowing why. War is not courtesy but the most horrible thing in The Council of War began to assemble at two in the afternoon in the than that. We took Vienna, Berlin, Madrid, Naples, Rome, Warsaw, all "The path to Warsaw, perhaps," Prince Hippolyte remarked loudly and had first wanted to effect a diversion in Greece and then in Warsaw but rodri@CIS106:~/Documents/Books\$

same applies to historical events. Why war and revolution occur we do downwards, a man indubitably believes this and always expects the law in memory, or what is the same thing the farther I go forward in my The Austro-Prussian war appears to us undoubtedly the result of the crafty conduct of Bismarck, and so on. The Napoleonic wars still seem or mother, or self-sacrifice with the possibility of a reward, is more with the self-destruction toward which—ever dissecting and dissecting *** END OF THE PROJECT GUTENBERG EBOOK WAR AND PEACE ***

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the "Right LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE. warranties or the exclusion or limitation of certain types of rodri@CIS106:~/Documents/Books\$ grep -i "War" war-and-peace.txt

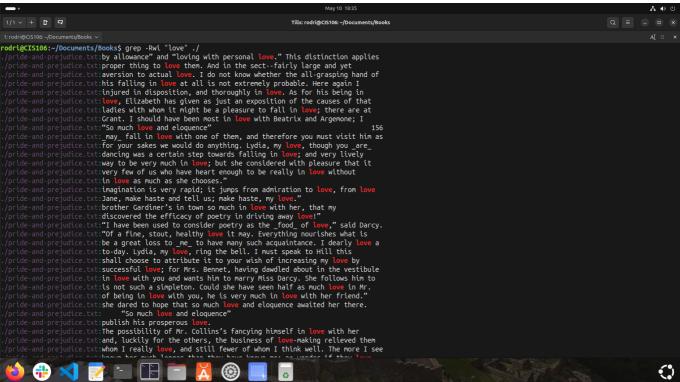
rodri@CIS106:~/Documents/Books\$ grep -ic "War" war-and-peace.txt
1255
rodri@CIS106:~/Documents/Books\$

rodri@CIS106:~/Documents/Books\$ grep -iwc "War" war-and-peace.txt
293

rodri@CIS106:~/Documents/Books\$

rodri@CIS106:~/Documents/Books\$ grep -in "^peace" war-and-peace.txt
5542:peace. The old man was beside himself: moved the chair on which he was
20046:peace."
26471:peace." But however much they left her in peace she could not now be
33900:peace so long as a single armed enemy remained on Russian soil and told
34397:peace with you. As for the Swedes—it is their fate to be governed by
35057:peace nor war, neither an advance nor a defensive camp at the Drissa
36617:peace and the abolition of war, and secondly, by the fact that when he
44768:peaceful, and glorious fatherland, I should have proclaimed
51593:peace arising from consciousness of having stifled those personal dreams
58824:peace, he said: There can be no peace, for such is the people's will. He
59768:peaceful refuge where he could recover himself, rest, and think over
rodri@CIS106:~/Documents/Books\$

rodri@CIS106:~/Documents/Books\$ grep -nw "^The" war-and-peace.txt 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, 1081:The Abbé Morio and many others had also come. 1102:**The** young Princess Bolkónskaya had brought some work in a 1118:**The** little princess went round the table with quick, short, swaying 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 1240:The vicomte bowed and smiled courteously in token of his willingness to .251: ${\sf The}$ 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 1289:The little princess had also left the tea table and followed Hélène. 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 351:The vicomte appreciated this silent praise and smiling gratefully



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```
'odri@CIS106:~/Documents/Books$ grep -Rn "^l...d" ./
 /pride-and-prejudice.txt:1720:liked a red coat myself very well--and, indeed, so I do still at my
/pride-and-prejudice.txt:9474:lived. Not like the wild young men now-a-days, who think of nothing but
/pride-and-prejudice.txt:10016:loved her, but for loving her still well enough to forgive all the
 /pride-and-prejudice.txt:10016:loved her, but for loving her still well enough to forgive all the /pride-and-prejudice.txt:13948:liked him but Jane; and even feared that with the others it was a /war-and-peace.txt:5254:liked to. He looked inquiringly at his monitress and saw that she was /war-and-peace.txt:7296:liked to tell him. He gathered up the papers and with a bow to both, /war-and-peace.txt:12933:liked to repeat to herself. It was the story of a girl who had been /war-and-peace.txt:13034:loved more than himself. He kept telling himself that he would consider
  /war-and-peace.txt:13034:toved more than fithself. He kept telling himself that he would consider
/war-and-peace.txt:13817:liked to help young men, was flattered by being asked for his assistance
/war-and-peace.txt:21373:lived for glory.—And after all what is glory? The same love of others,
/war-and-peace.txt:21375:lived for others, and not almost, but quite, ruined my life. And I have
   /war-and-peace.txt:22829:lie down in my room and have a rest."
  /war-and-peace.txt:23565:lived for myself alone while others live so apart from it, but so that /war-and-peace.txt:25906:liked her voice. She asked this and then became confused, feeling that
 /war-and-peace.txt:25906:liked her voice. sne asked this and then became confused, realing /war-and-peace.txt:25908:liked her singing as he liked everything she did.
/war-and-peace.txt:26188:loved.) "I... but no, I will talk to you later on," and with a /war-and-peace.txt:26971:loved his wife, she died, but that was not enough: he wanted to bind /war-and-peace.txt:28969:lived in animals, and will go back into animals again."
                                                              lived for a whole eternity
 <mark>-odri@CIS106:~/Documents/Books</mark>$ grep -wniR "^d[aeiou]..." ./
 /pride-and-prejudice.txt:420:Darcy; nearly all of them would have palpitated and fluttered at the /pride-and-prejudice.txt:1022:dance."
 /pride-and-prejudice.txt:1022:dance."
/pride-and-prejudice.txt:1036:Darcy, looking at the eldest Miss Bennet.
/pride-and-prejudice.txt:1110:dear, to have given him one of your set-downs. I quite detest the man."
/pride-and-prejudice.txt:1399:dark. There is so much of gratitude or vanity in almost every
/pride-and-prejudice.txt:1851:dirty weather, and by herself, was almost incredible to Mrs. Hurst and
/pride-and-prejudice.txt:1851:dirty weather, and the general pause which ensued made Elizabeth
                                                                                        to have given him one of your set-downs. I quite detest the man."
  /pride-and-prejudice.txt:2321:Darcy only smiled; and the general pause which ensued made Elizabeth /pride-and-prejudice.txt:2547:Darcy had much better finish his letter."

/pride-and-prejudice.txt:2584:dare."

/pride-and-prejudice.txt:2584:dare."
  /pride-and-prejudice.txt:2690:door. He then sat down by her, and talked scarcely to anyone else. /pride-and-prejudice.txt:2696:Darcy did not wish for cards, and Mr. Hurst soon found even his open /pride-and-prejudice.txt:2706:Darcy's progress through _his_ book, as in reading her own; and she was
   /pride-and-prejudice.txt:2789:Darcy may hug himself."
/pride-and-prejudice.txt:3088:<mark>doubt her seeing them a</mark>l
                                                                                       her seeing them all in due time well disposed of in marriage. This
                                                                                                                                                                                                                   May 10 18:44
  1/1 ∨ + 🗗 ⋤
                                                                                                                                                                                             Tilix: rodri@CIS106: ~/Documents/Books
 1: rodri@CIS106: ~/Documents/Books ~
rodri@CIS106:~/Documents/Books$ grep -iE "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
rodri@CIS106:~/Documents/Books$
```