Lab 7

Question 1

Question 2

```
tdelane-smith@cis106:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
tdelane-smith@cis106:~/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
```

```
tdelane-smith@cis106:~/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
```

```
Chrysler Lebaron Salon = 6
Chevrolet Cavalier = 4
Chevrolet Cavalier Wagon = 4
Chevrolet Cavalier 2-door = 4
Pontiac J2000 SE Hatchback = 4
Dodge Aries SE = 4
Pontiac Phoenix = 4
Ford Fairmont Futura = 4
AMC Concord DL = 4
Volkswagen Rabbit l = 4
Mazda GLC Custom l = 4
Mazda GLC Custom = 4
Plymouth Horizon Miser = 4
Mercury Lynx l = 4
Nissan Stanza XE = 4
Honda Accord = 4
Toyota Corolla = 4
Honda Civic = 4
Honda Civic (auto) = 4
Datsun 310 GX = 4
Buick Century Limited = 6
Oldsmobile Cutlass Ciera (diesel) = 6
Chrysler Lebaron Medallion = 4
Ford Grenada l = 6
Toyota Celica GT = 4
Dodge Charger 2.2 = 4
Chevrolet Camaro = 4
Ford Mustang GL = 4
Volkswagen Pickup = 4
Dodge Rampage = 4
Ford Ranger = 4
Chevy S-10 = 4
tdelane-smith@cis106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv --output-delimiter=" = "
```

```
Volkswagen Rabbit l;36.0;4;105.0;74.00;1980.;15.3;82;Europe
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
tdelane-smith@cis106:~/Documents/Csv$ sort cars.csv
```

```
All-Bran;K;C;70;4;1;260;9;7;5;320;25;3;1;0.33;59.425505
Shredded Wheat;N;C;80;2;0;0;3;16;0;95;0;1;0.83;1;68.235885
Raisin Squares;K;C;90;2;0;0;2;15;6;110;25;3;1;0.5;55.333142
Strawberry Fruit Wheats;N;C;90;2;0;15;3;15;5;90;25;2;1;1;59.363993
Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253
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
Nutri-grain Wheat;K;C;90;3;0;170;3;18;2;90;25;3;1;1;59.642837
Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813
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
tdelane-smith@cis106:~/Documents/Csv$ sort -t";" -k4 cereal.csv
```

Question 3

```
tdelane-smith@cis106:~/Documents/Csv$ cd ../Books/
tdelane-smith@cis106:~/Documents/Books$ ls
bible.txt  dracula.txt  great-expectastions.txt  pride-and-prejudice.txt  war-and-peace.txt
tdelane-smith@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 War with
interested the Minister of War less than any of the other matters he was
```

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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
tdelane-smith@cis106:~/Documents/Books$ grep -i "War" war-and-peace.txt
```

```
tdelane-smith@cis106:~/Documents/Books$ grep -ic "War" war-and-peace.txt
1255
tdelane-smith@cis106:~/Documents/Books$ grep -iwc "War" war-and-peace.txt
293
tdelane-smith@cis106:~/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
tdelane-smith@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
tdelane-smith@cis106:~/Documents/Books$
```

```
65199:The second consideration is the more or less evident time relation of
65208:The degree of our conception of freedom or inevitability depends in this
65233:The Austro-Prussian war appears to us undoubtedly the result of the
65246:The third consideration is the degree to which we apprehend that
65252:The better we are acquainted with the physiological, psychological, and
65466:The great natural forces lie outside us and we are not conscious of
65527:The recognition of man's free will as something capable of influencing
65544:The more this field of motion spreads out before our eyes, the more
65561:The search for these laws has long been begun and the new methods of
65622:The struggle between the old views and the new was long and stubbornly
65963:The Project Gutenberg Literary Archive Foundation is a non-profit
65971:The Foundation's business office is located at 809 North 1500 West,
65987:The Foundation is committed to complying with the laws regulating
tdelane-smith@cis106:~/Documents/Books$
```

```
tdelane-smith@cis106:~/Documents/Books$ grep -Rwi "love" ./
./dracula.txt:know her is to love her. I long to go through the crowded streets of
./dracula.txt:also that there is a chapel of old times. We Transylvanian nobles love
./dracula.txt:battlements and casements. I love the shade and the shadow, and would
./dracula.txt:thought and many blushes, her ill-spelt love-letter, and writing in my
./dracula.txt:“You yourself never loved; you never love!” On this the other women
./dracula.txt:“Yes, I too can love; you yourselves can tell it from the past. Is it
```

```
tdelane-smith@cis106:~/Documents/Books$ grep -n "^l...d" ./
grep: ./: Is a directory
tdelane-smith@cis106:~/Documents/Books$ grep -nR "^l...d" ./
./dracula.txt:5597:lay down, and when I went over to Bersicker he let me stroke his ears
./dracula.txt:9540:loved and honoured as our host is, everything regarding him is of
./dracula.txt:14713:loved him and honoured him more than I can say, and that my latest and
./dracula.txt:15427:loved her, that they did dare much for her sake.”
./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: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
```

```
tdelane-smith@cis106:~/Documents/Books$ grep -wniR "^d[aeiou]..." ./
/dracula.txt:136:don't know how I should be able to get on without it.
/dracula.txt:299:down, and, lest who reads them may fancy that I dined too well before I
/dracula.txt:511:delay. By-and-by, however, as I was curious to know how time was
/dracula.txt:534:doing, and with extraordinary effect, for under his caresses they became
/dracula.txt:712:door:--
/dracula.txt:1234:diary seems horribly like the beginning of the "Arabian Nights," for
/dracula.txt:1245:doing of certain kinds of business. I had spent the day wearily over
/dracula.txt:1371:doubt in question. I shall not fear to sleep in any place where he is
/dracula.txt:1469:diary in shorthand all that has happened since I closed it last. It is
/dracula.txt:1518:dust. In the moonlight opposite me were three young women, ladies by
/dracula.txt:2043:doom; I was to be given to the wolves, and at my own instigation. There
```

```
tdelane-smith@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
tdelane-smith@cis106:~/Documents/Books$
```