Lab 7

q1

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1: jgomez@cis106: ~/Documents/Csv ∨                                    A⌶  ▢  ✕

jgomez@cis106:~/Documents$ cd Csv/
jgomez@cis106:~/Documents/Csv$ ls
cars.csv  cereal.csv  contacts.csv  country.csv  film.csv
jgomez@cis106:~/Documents/Csv$ cat 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
```

```
100% Natural Bran;Q;C;120;3;5;15;2;8;8;135;0;3;1;1;33.983679
100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;F
loat;Float;Float
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins
;shelf;weight;cups;rating
jgomez@cis106:~/Documents/Csv$ tac cereal.csv █
```

```
jgomez@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;I
nt;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;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$
```

```
jgomez@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;F
loat;Float;Float
jgomez@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;1;200;1;16;8;60;25;1;1;0.75;36.187559
jgomez@cis106:~/Documents/Csv$
```

q2

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

```
jgomez@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
Chevrolet Impala;8
Plymouth Fury iii;8
Pontiac Catalina;8
```

```
 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
 jgomez@cis106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv --output-delimiter=" = "
```

```
Volkswagen Rabbit C (Diesel);44.3;4;90.00;48.00;2085.;21.7;80;Europe
Volkswagen Rabbit Custom;29.0;4;97.00;78.00;1940.;14.5;77;Europe
Volkswagen Rabbit Custom;31.9;4;89.00;71.00;1925.;14.0;79;Europe
Volkswagen Rabbit Custom Diesel;43.1;4;90.00;48.00;1985.;21.5;78;Europe
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
jgomez@cis106:~/Documents/Csv$ sort cars.csv
```

```
Puffed Rice;Q;C;50;1;0;0;0;13;0;15;0;3;0.5;1;60.756112
Puffed Wheat;Q;C;50;2;0;0;1;10;0;50;0;3;0.5;1;63.005645
All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.704912
100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973
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;rat
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
jgomez@cis106:~/Documents/Csv$ sort -t";" -k4 cereal.csv
```

q3

```
jgomez@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
```

```
 horse and loosening his rein galloped forward, not heeding Denísov who
 excited horse he galloped forward along the village street.
 Cossacks, while others ran down the hill toward the pond. Pétya was
 who was riding toward him.
 trembling hands turned toward himself the bloodstained, mud-bespattered
 From Vyázma onwards the French army, which had till then moved in three
 headlong, crushing one another, but had afterwards reassembled and
 while the other was warming; and that when he had put on tight dancing
 it was always warm walking in the daytime, and at night there were the
 campfires; the lice that devoured him warmed his body.) The one thing
 everybody got up he went along, limping, and, when he had warmed up,
 merchant free and give him a compensation that had been awarded. The
 When the prisoners again went forward Pierre looked round. Karatáev
 reckoning the Guards (who did nothing during the whole war but pillage)
 which Kutúzov afterwards pursued him—this unnecessary retreat along
 special animals called "heroes." And Napoleon, escaping home in a warm
 last period of the war of 1812 an aim that never existed, namely that of
jgomez@cis106:~/Documents/Books$ grep -i "War" war-and-peace.txt
```

```
jgomez@cis106:~/Documents/Books$ grep -ic "War" war-and-peace.txt
1119
jgomez@cis106:~/Documents/Books$ grep -iwc "War" war-and-peace.txt
265
jgomez@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
jgomez@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
jgomez@cis106:~/Documents/Books$
```

```
 57875:The movements of the Russian and French armies during the campaign
 57957:The retreat from Málo-Yaroslávets when he had a free road into a
 58057:The explanation of this strange fact given by Russian military
 58074:The Russian military historians in so far as they submit to claims
 58086:The source of this contradiction lies in the fact that the historians
jgomez@cis106:~/Documents/Books$ grep -nw "^The" war-and-peace.txt
```

```
jgomez@cis106:~/Documents/Books$ grep -Riw "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
./dracula.txt:to speak more. Oh, Mina, couldn't you guess? I love him. I am blushing
./dracula.txt:words. But oh, Mina, I love him; I love him; I love him! There, that
```

```
jgomez@cis106:~/Documents/Books$ grep -Rn "^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,
```

```
jgomez@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
```

```
jgomez@cis106:~/Documents/Books$ grep -Ei "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
jgomez@cis106:~/Documents/Books$ 
```