

Lab 7

Question 1

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reaper@cis106: ~/Documents/Csv
reaper@cis106:~/Documents$ cd Csv/
reaper@cis106:~/Documents/Csv$ ls
cars.csv  cereal.csv  contacts.csv  country.csv  film.csv
reaper@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;Float;Float;Float
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating
reaper@cis106:~/Documents/Csv$ tac cereal.csv
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;Float;Float;Float
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating
reaper@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;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$
  6  All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.7049

reaper@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
reaper@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
reaper@cis106:~/Documents/Csv$
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Question 2

```
reaper@cis106: ~/Documents/Csv
reaper@cis106:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
reaper@cis106:~/Documents/Csv$ cut -d";" -f1 cars.csv
Car
STRING
Chevrolet Chevelle Malibu
Buick Skylark 320
Plymouth Satellite
AMC Rebel SST
```

```
reaper@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
```

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

```
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
reaper@cis106:~/Documents/Csv$
```

```
Bran Chex;K;C;90;3;0;1;200;4;15;0;125;25;1;1;0.67;49.120255
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;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
reaper@cis106:~/Documents/Csv$ sort -t";" -k4 cereal.csv
```

Question 3

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

```

```

reaper@cis106: ~/Documents/Books
reaper@cis106:~/Documents/Books$ grep -ic "War" war-and-peace.txt
1255
reaper@cis106:~/Documents/Books$ grep -lwc "War" war-and-peace.txt
293
reaper@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
reaper@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
reaper@cis106:~/Documents/Books$

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65240:The entire 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
reaper@cis106:~/Documents/Books$ grep -nw "^The" war-and-peace.txt

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```
reaper@cis106: ~/Documents/Books
reaper@cis106:~/Documents/Books$ grep -Rwi "love" ./
./great-expectastions.txt:because the dear fellow let me love him,—and, as to him, my inner se
lf
./great-expectastions.txt:“Cousin Raymond,” observed another lady, “we are to love our
./great-expectastions.txt:anxiety of those I love. If I could be less affectionate and sensi
ve,
./great-expectastions.txt: (“Much higher than your head, my love,” said Mr. Camilla.)
./great-expectastions.txt:thank you, my love?”
./great-expectastions.txt:and depart. It’s something to have seen the object of one’s love and
./great-expectastions.txt:“If I could only get myself to fall in love with you,—you don’t mind
my
```

```
reaper@cis106:~/Documents/Books$ grep -nR "^l...d" ./
./great-expectastions.txt:153:lamed by stones, and cut by flints, and stung by nettles, and to
rn by
./great-expectastions.txt:1696:loved Joe,—perhaps for no better reason in those early days tha
n
./great-expectastions.txt:2141:lived in a large and dismal house barricaded against robbers, a
nd who
./great-expectastions.txt:3109:liked sometimes to smoke his pipe there. I had received strict
orders
./great-expectastions.txt:9750:loved her none the less because I knew it, and it had no more i
nfluence
./great-expectastions.txt:14039:laundress or her niece, he was to keep himself out of their vi
ew until
./great-expectastions.txt:14327:lived, before going up the stairs, Garden Court was as still a
nd
./great-expectastions.txt:14639:lived at the top of Compeyson’s house (over nigh Brentford it
was), and
./great-expectastions.txt:16620:lived in the supplementary house across the back courtyard, on
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```
reaper@cis106: ~/Documents/Books
reaper@cis106:~/Documents/Books$ grep -wniR "^d[aeiou]..." ./
./great-expectastions.txt:511:dead.”
./great-expectastions.txt:735:down, for it made him stumble,—and then he ran into the mist, stumbling
./great-expectastions.txt:981:done. Under the weight of my wicked secret, I pondered whether the
./great-expectastions.txt:1320:dusk, my orders are. That’ll do.”
./great-expectastions.txt:1326:dusk. Anybody here seen anything of any such game?”
./great-expectastions.txt:1485:deer, and Joe too.
./great-expectastions.txt:1492:ditch. “Surrender, you two! and confound you for two wild beasts! Come
./great-expectastions.txt:1497:ditch to help the sergeant, and dragged out, separately, my convict and
./great-expectastions.txt:1574:ditch when we came up, and had not moved since. I looked at him eagerly
./great-expectastions.txt:1594:Don’t straggle, my man. Close up here.”
./great-expectastions.txt:1617:dozen soldiers all at once. Three or four soldiers who lay upon it in
./great-expectastions.txt:2032:don’t deny that your sister comes the Mo-gul over us, now and again. I
./great-expectastions.txt:2033:don’t deny that she do throw us back-falls, and that she do drop down
./great-expectastions.txt:2074:Dutch-clock a-working himself up to being equal to strike Eight of ’em,
./great-expectastions.txt:2162:doing—“that I have for ever been a willing slave to?”
./great-expectastions.txt:2319:don’t you think so?”
```

```
reaper@cis106: ~/Documents/Books
reaper@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
```