

Lab 7 Submission

Question 1

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1:jaleman2@jaleman2-VirtualBox: ~/Documents/Csv
jaleman2@jaleman2-VirtualBox:~/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% 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;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

1:jaleman2@jaleman2-VirtualBox: ~/Documents/Csv
jaleman2@jaleman2-VirtualBox:~/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
jaleman2@jaleman2-VirtualBox:~/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;93.704912^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;C;C;110;2;2;100;1;5;10;5;10;70;25;1;1;0.75;30.50
jaleman2@jaleman2-VirtualBox:~/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
jaleman2@jaleman2-VirtualBox:~/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
jaleman2@jaleman2-VirtualBox:~/Documents/Csv$
```

Question 2

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jaleman2@jaleman2-VirtualBox:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
jaleman2@jaleman2-VirtualBox:~/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
```

```
jaleman2@jaleman2-VirtualBox:~/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
Plymouth Cutlass Supreme
```

```
jaleman2@jaleman2-VirtualBox:~/Documents/Csv$ cut -d";" -f1,3 cars.csv --output-delimiter=" = "
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```
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
```

```
jaleman2@jaleman2-VirtualBox:~/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
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```
jaleman2@jaleman2-VirtualBox:~/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
```

Question 3

```
jaleman2@jaleman2-VirtualBox:~/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
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
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```
jaleman2@jaleman2-VirtualBox:~/Documents/Books$ grep -i "War" war-and-peace.txt
The Project Gutenberg eBook of War and Peace, by Leo Tolstoy
Title: War and Peace
*** START OF THE PROJECT GUTENBERG EBOOK WAR AND PEACE ***
WAR AND PEACE
Buonapartes. But I warn you, if you don't tell me that this means war,
things, but Austria never has wished, and does not wish, for war. She
Pávlovna's hand and for some reason drawing it downwards. "Arrange
to get himself killed. Tell me what this wretched war is for?" she
she moved toward Anna Pávlovna. Hélène was so lovely that not only
"You are off to the war, Prince?" said Anna Pávlovna.
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jaleman2@jaleman2-VirtualBox:~/Documents/Books$ grep -ic "War" war-and-peace.txt1255
jaleman2@jaleman2-VirtualBox:~/Documents/Books$ grep -iwc "War" war-and-peace.txt
293
jaleman2@jaleman2-VirtualBox:~/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
jaleman2@jaleman2-VirtualBox:~/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
jaleman2@jaleman2-VirtualBox:~/Documents/Books$
```

```
jaleman2@jaleman2-VirtualBox:~/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 Bolcónskaya 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
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```
jaleman2@jaleman2-VirtualBox:~/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
./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
./dracula.txt:I could love him in time; and when I shook my head his hands trembled,
```

```
jaleman2@jaleman2-VirtualBox:~/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."
./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: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
```

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jaleman2@jaleman2-VirtualBox:~/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
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jaleman2@jaleman2-VirtualBox:~/Documents/Books$ grep -iE "e{2}" dracula.txt
How these papers have been placed in sequence will be made manifest in
the reading of them. All needless matters have been eliminated, so that
hour late. Buda-Pesth seems a wonderful place, from the glimpse which I
streets. I feared to go very far from the station, as we had arrived
Carpathians. I found my smattering of German very useful here; indeed, I
extreme east of the country, just on the borders of three states,
I did not sleep well, though my bed was comfortable enough, for I had
all sorts of queer dreams. There was a dog howling all night under my
window, which may have had something to do with it; or it may have been
knocking at my door, so I guess I must have been sleeping soundly then.
before we began to move. It seems to me that the further east you go the
```