

Lab 7

Question 1

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mahima-rana@cis106: ~/Documents/Csv
mahima-rana@cis106:~/Documents$ cd Csv/
mahima-rana@cis106:~/Documents/Csv$ ls
cars.csv  cereal.csv  contacts.csv  country.csv  film.csv  sorted_cars.csv
mahima-rana@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% 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
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
mahima-rana@cis106:~/Documents/Csv$ tac cereal.csv
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$
100% Natural Bran;Q;C;120;3;5;15;2;8;8;135;0;3;1;1;33.983679^M$
100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973^M$
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float^M$
name;mfr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cups;rating^M$
mahima-rana@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;93.704912
mahima-rana@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
mahima-rana@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
mahima-rana@cis106:~/Documents/Csv$

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Question 2

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mahima-rana@cis106: ~/Documents/Csv
mahima-rana@cis106:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
mahima-rana@cis106:~/Documents/Csv$ cut -d";" -f1 cars.csv
Car
STRING
Chevrolet Chevelle Malibu
Buick Skylark 320
Plymouth Satellite
AMC Rebel SST
Ford Torino
mahima-rana@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
Chevrolet Camaro = 4
Ford Mustang GL = 4
Volkswagen Pickup = 4
Dodge Rampage = 4
Ford Ranger = 4
Chevy S-10 = 4
mahima-rana@cis106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv --output-delimiter=
" = "
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
mahima-rana@cis106:~/Documents/Csv$ sort cars.csv
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
mahima-rana@cis106:~/Documents/Csv$ sort -t";" -k4 cereal.csv

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Question 3

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mahima-rana@cis106: ~/Documents/Books
mahima-rana@cis106:~/Documents/Csv$ cd ../Books/
mahima-rana@cis106:~/Documents/Books$ ls
bible.txt      great-expectations.txt  pride-and-prejudice.txt
dracula.txt    mybooks.txt             war-and-peace.txt
mahima-rana@cis106:~/Documents/Books$ grep "war" war-and-peace.txt
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
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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
mahima-rana@cis106:~/Documents/Books$ grep -i "war" war-and-peace.txt
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mahima-rana@cis106: ~/Documents/Books
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
mahima-rana@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
mahima-rana@cis106:~/Documents/Books$
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
mahima-rana@cis106:~/Documents/Books$ grep -nw "^The" war-and-peace.txt
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mahima-rana@cis106: ~/Documents/Books
mahima-rana@cis106:~/Documents/Books$ grep -Rwi "love" ./
./pride-and-prejudice.txt:by allowance" and "loving with personal love." This distinction applies
./pride-and-prejudice.txt:proper thing to love them. And in the sect--fairly large and yet
./pride-and-prejudice.txt:aversion to actual love. I do not know whether the all-grasping hand of
./pride-and-prejudice.txt:his falling in love at all is not extremely probable. Here again I
./pride-and-prejudice.txt:injured in disposition, and thoroughly in love. As for his being in
./pride-and-prejudice.txt:love, Elizabeth has given as just an exposition of the causes of that

mahima-rana@cis106:~/Documents/Books$ grep -nR "^l...d" ./
./pride-and-prejudice.txt:1724:liked a red coat myself very well--and, indeed, so I do still at my
./pride-and-prejudice.txt:9478:lived. Not like the wild young men now-a-days, who think of nothing
but
./pride-and-prejudice.txt:10020:loved her, but for loving her still well enough to forgive all the
./pride-and-prejudice.txt:13952:liked him but Jane; and even feared that with the others it was a
./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

mahima-rana@cis106:~/Documents/Books$ grep -wniR "^d[aeiou]..." ./
./pride-and-prejudice.txt:424:Darcy; nearly all of them would have palpitated and fluttered at the
./pride-and-prejudice.txt:1026:dance."
./pride-and-prejudice.txt:1040:Darcy, looking at the eldest Miss Bennet.
./pride-and-prejudice.txt:1114:dear, to have given him one of your set-downs. I quite detest the ma
n."
./pride-and-prejudice.txt:1403:dark. There is so much of gratitude or vanity in almost every
./pride-and-prejudice.txt:1855:dirty weather, and by herself, was almost incredible to Mrs. Hurst a
nd

mahima-rana@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
mahima-rana@cis106:~/Documents/Books$ grep -iE "e{2}" dracula.txt
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