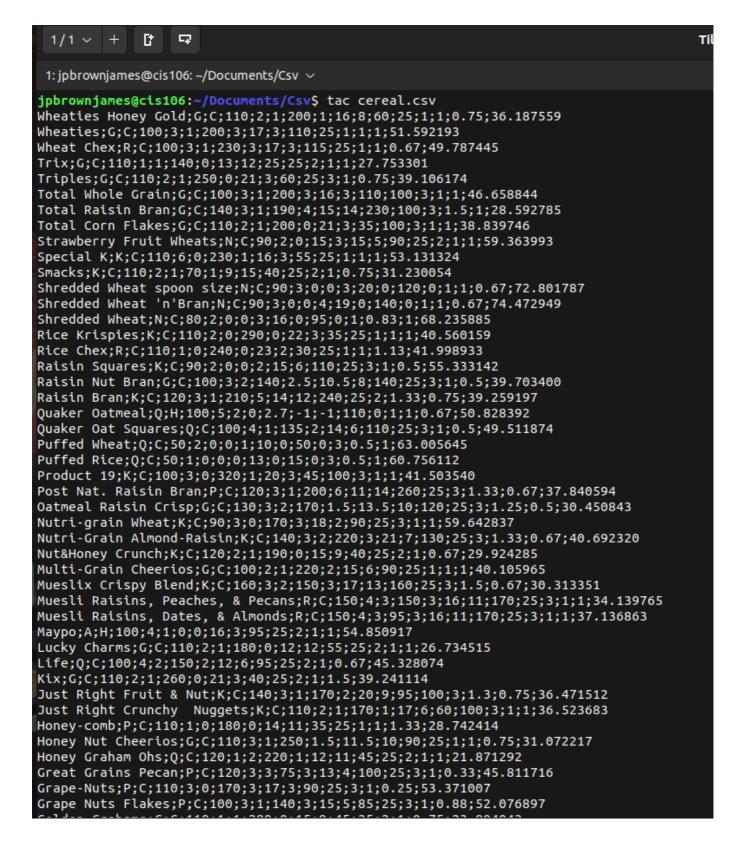# Question 1

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1/1 ∨    +    ⬚    ⬛                                    Tilix: jpbrownjames@cis

1: jpbrownjames@cis106: ~/Documents/Csv ∨

jpbrownjames@cis106:~/Documents$ cd Csv/
jpbrownjames@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
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
Apple Cinnamon Cheerios;G;C;110;2;2;180;1.5;10.5;10;70;25;1;1;0.75;29.509541
Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094
Basic 4;G;C;130;3;2;210;2;18;8;100;25;3;1.33;0.75;37.038562
Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253
Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813
Cap'n'Crunch;Q;C;120;1;2;220;0;12;12;35;25;2;1;0.75;18.042851
Cheerios;G;C;110;6;2;290;2;17;1;105;25;1;1;1.25;50.764999
Cinnamon Toast Crunch;G;C;120;1;3;210;0;13;9;45;25;2;1;0.75;19.823573
Clusters;G;C;110;3;2;140;2;13;7;105;25;3;1;0.5;40.400208
Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1;22.736446
Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019
Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324
Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.782791
Count Chocula;G;C;110;1;1;180;0;12;13;65;25;2;1;1;22.396513
Cracklin' Oat Bran;K;C;110;3;3;140;4;10;7;160;25;3;1;0.5;40.448772
Cream of Wheat (Quick);N;H;100;3;0;80;1;21;0;-1;0;2;1;1;64.533816
Crispix;K;C;110;2;0;220;1;21;3;30;25;3;1;1;46.895644
Crispy Wheat & Raisins;G;C;100;2;1;140;2;11;10;120;25;3;1;0.75;36.176196
Double Chex;R;C;100;2;0;190;1;18;5;80;25;3;1;0.75;44.330856
Froot Loops;K;C;110;2;1;125;1;11;13;30;25;2;1;1;32.207582
Frosted Flakes;K;C;110;1;0;200;1;14;11;25;25;1;1;0.75;31.435973
Frosted Mini-Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;58.345141
Fruit & Fibre Dates, Walnuts, and Oats;P;C;120;3;2;160;5;12;10;200;25;3;1.25;0.67;40.917047
Fruitful Bran;K;C;120;3;0;240;5;14;12;190;25;3;1.33;0.67;41.015492
Fruity Pebbles;P;C;110;1;1;135;0;13;12;25;25;2;1;0.75;28.025765
Golden Crisp;P;C;100;2;0;45;0;11;15;40;25;1;1;0.88;35.252444
Golden Grahams;G;C;110;1;1;280;0;15;9;45;25;2;1;0.75;23.804043
Grape Nuts Flakes;P;C;100;3;1;140;3;15;5;85;25;3;1;0.88;52.076897
Grape-Nuts;P;C;110;3;0;170;3;17;3;90;25;3;1;0.25;53.371007
Great Grains Pecan;P;C;120;3;3;75;3;13;4;100;25;3;1;0.33;45.811716
Honey Graham Ohs;Q;C;120;1;2;220;1;12;11;45;25;2;1;1;21.871292
Honey Nut Cheerios;G;C;110;3;1;250;1.5;11.5;10;90;25;1;1;0.75;31.072217
Honey-comb;P;C;110;1;0;180;0;14;11;35;25;1;1;1.33;28.742414
Just Right Crunchy  Nuggets;K;C;110;2;1;170;1;17;6;60;100;3;1;1;36.523683
Just Right Fruit & Nut;K;C;140;3;1;170;2;20;9;95;100;3;1.3;0.75;36.471512
Kix;G;C;110;2;1;260;0;21;3;40;25;2;1;1.5;39.241114
Life;Q;C;100;4;2;150;2;12;6;95;25;2;1;0.67;45.328074
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1: jpbrownjames@cis106: ~/Documents/Csv ∨

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jpbrownjames@cis106:~/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
Special K;K;C;110;6;0;230;1;16;3;55;25;1;1;1;53.131324
Smacks;K;C;110;2;1;70;1;9;15;40;25;2;1;0.75;31.230054
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
Shredded Wheat;N;C;80;2;0;0;3;16;0;95;0;1;0.83;1;68.235885
Rice Krispies;K;C;110;2;0;290;0;22;3;35;25;1;1;1;40.560159
Rice Chex;R;C;110;1;0;240;0;23;2;30;25;1;1;1.13;41.998933
Raisin Squares;K;C;90;2;0;0;2;15;6;110;25;3;1;0.5;55.333142
Raisin Nut Bran;G;C;100;3;2;140;2.5;10.5;8;140;25;3;1;0.5;39.703400
Raisin Bran;K;C;120;3;1;210;5;14;12;240;25;2;1.33;0.75;39.259197
Quaker Oatmeal;Q;H;100;5;2;0;2.7;-1;-1;110;0;1;1;0.67;50.828392
Quaker Oat Squares;Q;C;100;4;1;135;2;14;6;110;25;3;1;0.5;49.511874
Puffed Wheat;Q;C;50;2;0;0;1;10;0;50;0;3;0.5;1;63.005645
Puffed Rice;Q;C;50;1;0;0;0;13;0;15;0;3;0.5;1;60.756112
Product 19;K;C;100;3;0;320;1;20;3;45;100;3;1;1;41.503540
Post Nat. Raisin Bran;P;C;120;3;1;200;6;11;14;260;25;3;1.33;0.67;37.840594
Oatmeal Raisin Crisp;G;C;130;3;2;170;1.5;13.5;10;120;25;3;1.25;0.5;30.450843
Nutri-grain Wheat;K;C;90;3;0;170;3;18;2;90;25;3;1;1;59.642837
Nutri-Grain Almond-Raisin;K;C;140;3;2;220;3;21;7;130;25;3;1.33;0.67;40.692320
Nut&Honey Crunch;K;C;120;2;1;190;0;15;9;40;25;2;1;0.67;29.924285
Multi-Grain Cheerios;G;C;100;2;1;220;2;15;6;90;25;1;1;1;40.105965
Mueslix Crispy Blend;K;C;160;3;2;150;3;17;13;160;25;3;1.5;0.67;30.313351
Muesli Raisins, Peaches, & Pecans;R;C;150;4;3;150;3;16;11;170;25;3;1;1;34.139765
Muesli Raisins, Dates, & Almonds;R;C;150;4;3;95;3;16;11;170;25;3;1;1;37.136863
Maypo;A;H;100;4;1;0;0;16;3;95;25;2;1;1;54.850917
Lucky Charms;G;C;110;2;1;180;0;12;12;55;25;2;1;1;26.734515
Life;Q;C;100;4;2;150;2;12;6;95;25;2;1;0.67;45.328074
Kix;G;C;110;2;1;260;0;21;3;40;25;2;1;1.5;39.241114
Just Right Fruit & Nut;K;C;140;3;1;170;2;20;9;95;100;3;1.3;0.75;36.471512
Just Right Crunchy  Nuggets;K;C;110;2;1;170;1;17;6;60;100;3;1;1;36.523683
Honey-comb;P;C;110;1;0;180;0;14;11;35;25;1;1;1.33;28.742414
Honey Nut Cheerios;G;C;110;3;1;250;1.5;11.5;10;90;25;1;1;0.75;31.072217
Honey Graham Ohs;Q;C;120;1;2;220;1;12;11;45;25;2;1;1;21.871292
Great Grains Pecan;P;C;120;3;3;75;3;13;4;100;25;3;1;0.33;45.811716
Grape-Nuts;P;C;110;3;0;170;3;17;3;90;25;3;1;0.25;53.371007
Grape Nuts Flakes;P;C;100;3;1;140;3;15;5;85;25;3;1;0.88;52.076897
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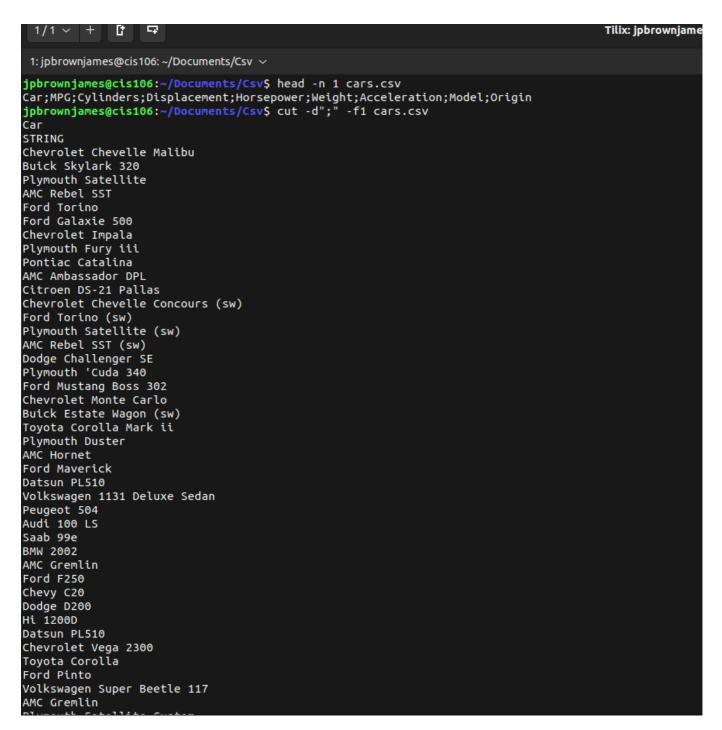
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1/1 ∨  +  ⨋  ⎚                                    Tilix: jpbrownjames@cis106: ~/Documen

1: jpbrownjames@cis106: ~/Documents/Csv ∨

jpbrownjames@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^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;G;C;110;2;2;180;1.5;10.5;10;70;25;1;1;0.75;29.509541^M$
     9  Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094^M$
    10  Basic 4;G;C;130;3;2;210;2;18;8;100;25;3;1.33;0.75;37.038562^M$
    11  Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253^M$
    12  Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813^M$
    13  Cap'n'Crunch;Q;C;120;1;2;220;0;12;12;35;25;2;1;0.75;18.042851^M$
    14  Cheerios;G;C;110;6;2;290;2;17;1;105;25;1;1;1.25;50.764999^M$
    15  Cinnamon Toast Crunch;G;C;120;1;3;210;0;13;9;45;25;2;1;0.75;19.823573^M$
    16  Clusters;G;C;110;3;2;140;2;13;7;105;25;3;1;0.5;40.400208^M$
    17  Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1;22.736446^M$
    18  Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019^M$
    19  Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324^M$
    20  Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.782791^M$
    21  Count Chocula;G;C;110;1;1;180;0;12;13;65;25;2;1;1;22.396513^M$
    22  Cracklin' Oat Bran;K;C;110;3;3;140;4;10;7;160;25;3;1;0.5;40.448772^M$
    23  Cream of Wheat (Quick);N;H;100;3;0;80;1;21;0;-1;0;2;1;1;64.533816^M$
    24  Crispix;K;C;110;2;0;220;1;21;3;30;25;3;1;1;46.895644^M$
    25  Crispy Wheat & Raisins;G;C;100;2;1;140;2;11;10;120;25;3;1;0.75;36.176196^M$
    26  Double Chex;R;C;100;2;0;190;1;18;5;80;25;3;1;0.75;44.330856^M$
    27  Froot Loops;K;C;110;2;1;125;1;11;13;30;25;2;1;1;32.207582^M$
    28  Frosted Flakes;K;C;110;1;0;200;1;14;11;25;25;1;1;0.75;31.435973^M$
    29  Frosted Mini-Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;58.345141^M$
    30  Fruit & Fibre Dates, Walnuts, and Oats;P;C;120;3;2;160;5;12;10;200;25;3;1.25;0.67;40.917047^M$
    31  Fruitful Bran;K;C;120;3;0;240;5;14;12;190;25;3;1.33;0.67;41.015492^M$
    32  Fruity Pebbles;P;C;110;1;1;135;0;13;12;25;25;2;1;0.75;28.025765^M$
    33  Golden Crisp;P;C;100;2;0;45;0;11;15;40;25;1;1;0.88;35.252444^M$
    34  Golden Grahams;G;C;110;1;1;280;0;15;9;45;25;2;1;0.75;23.804043^M$
    35  Grape Nuts Flakes;P;C;100;3;1;140;3;15;5;85;25;3;1;0.88;52.076897^M$
    36  Grape-Nuts;P;C;110;3;0;170;3;17;3;90;25;3;1;0.25;53.371007^M$
    37  Great Grains Pecan;P;C;120;3;3;75;3;13;4;100;25;3;1;0.33;45.811716^M$
    38  Honey Graham Ohs;Q;C;120;1;2;220;1;12;11;45;25;2;1;1;21.871292^M$
    39  Honey Nut Cheerios;G;C;110;3;1;250;1.5;11.5;10;90;25;1;1;0.75;31.072217^M$
    40  Honey-comb;P;C;110;1;0;180;0;14;11;35;25;1;1;1.33;28.742414^M$
    41  Just Right Crunchy  Nuggets;K;C;110;2;1;170;1;17;6;60;100;3;1;1;36.523683^M$
    42  Just Right Fruit & Nut;K;C;140;3;1;170;2;20;9;95;100;3;1.3;0.75;36.471512^M$
    43  Kix;G;C;110;2;1;260;0;21;3;40;25;2;1;1.5;39.241114^M$
    44  Life;Q;C;100;4;2;150;2;12;6;95;25;2;1;0.67;45.328074^M$
    45  Lucky Charms;G;C;110;2;1;180;0;12;12;55;25;2;1;1;26.734515^M$
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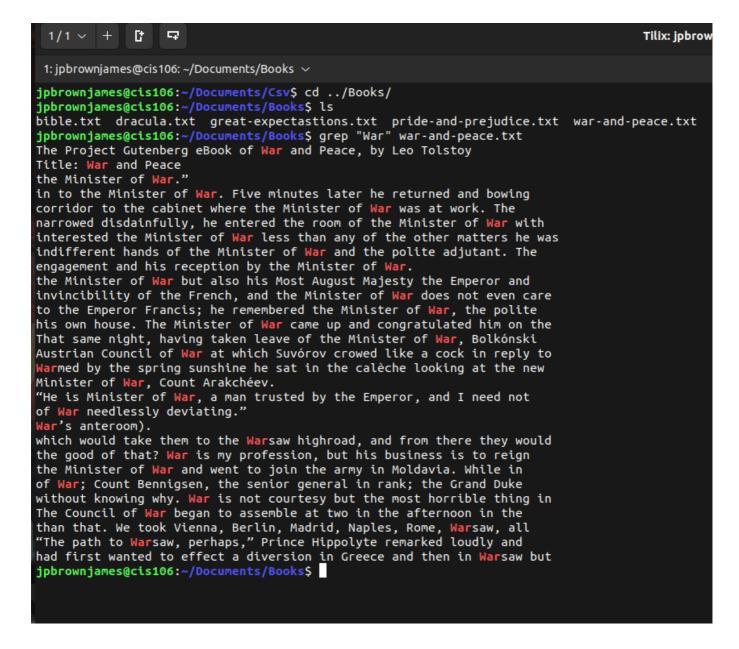
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1/1 ∨  +  ⨋  ⎚                                    Tilix: jpbrownjames@cis106: ~/Do

1: jpbrownjames@cis106: ~/Documents/Csv ∨

jpbrownjames@cis106:~/Documents/Csv$ head -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
jpbrownjames@cis106:~/Documents/Csv$ tail -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
jpbrownjames@cis106:~/Documents/Csv$ ▮
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Question 2

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1/1 ∨    +    ▯    ⬚                                                      Tilix: jpbrownjame

1: jpbrownjames@cis106: ~/Documents/Csv ∨

jpbrownjames@cis106:~/Documents/Csv$ head -n 1 cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
jpbrownjames@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
Citroen DS-21 Pallas
Chevrolet Chevelle Concours (sw)
Ford Torino (sw)
Plymouth Satellite (sw)
AMC Rebel SST (sw)
Dodge Challenger SE
Plymouth 'Cuda 340
Ford Mustang Boss 302
Chevrolet Monte Carlo
Buick Estate Wagon (sw)
Toyota Corolla Mark ii
Plymouth Duster
AMC Hornet
Ford Maverick
Datsun PL510
Volkswagen 1131 Deluxe Sedan
Peugeot 504
Audi 100 LS
Saab 99e
BMW 2002
AMC Gremlin
Ford F250
Chevy C20
Dodge D200
Hi 1200D
Datsun PL510
Chevrolet Vega 2300
Toyota Corolla
Ford Pinto
Volkswagen Super Beetle 117
AMC Gremlin
Plymouth Satellite Custom
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1: jpbrownjames@cis106: ~/Documents/Csv ∨

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jpbrownjames@cis106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv
Car;Cylinders
STRING;INT                              5 / 12
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
AMC Ambassador DPL;8
Citroen DS-21 Pallas;4
Chevrolet Chevelle Concours (sw);8
Ford Torino (sw);8
Plymouth Satellite (sw);8
AMC Rebel SST (sw);8
Dodge Challenger SE;8
Plymouth 'Cuda 340;8
Ford Mustang Boss 302;8
Chevrolet Monte Carlo;8
Buick Estate Wagon (sw);8
Toyota Corolla Mark ii;4
Plymouth Duster;6
AMC Hornet;6
Ford Maverick;6
Datsun PL510;4
Volkswagen 1131 Deluxe Sedan;4
Peugeot 504;4
Audi 100 LS;4
Saab 99e;4
BMW 2002;4
AMC Gremlin;6
Ford F250;8
Chevy C20;8
Dodge D200;8
Hi 1200D;8
Datsun PL510;4
Chevrolet Vega 2300;4
Toyota Corolla;4
Ford Pinto;4
Volkswagen Super Beetle 117;4
AMC Gremlin;6
Plymouth Satellite Custom;6
Chevrolet Chevelle Malibu;6
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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
jpbrownjames@cis106:~/Documents/Csv$ cut -d";" -f1,3 cars.csv --output-delimiter=" = "
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Toyota Mark II;19.0;6;156.0;108.0;2930.;15.5;76;Japan
Toyota Mark II;20.0;6;156.0;122.0;2807.;13.5;73;Japan
Toyota Starlet;39.1;4;79.00;58.00;1755.;16.9;81;Japan
Toyota Tercel;37.7;4;89.00;62.00;2050.;17.3;81;Japan
Triumph TR7 Coupe;35.0;4;122.0;88.00;2500.;15.1;80;Europe
Volkswagen 1131 Deluxe Sedan;26.0;4;97.00;46.00;1835.;20.5;70;Europe
Volkswagen 411 (sw);22.0;4;121.0;76.00;2511.;18.0;72;Europe
Volkswagen Dasher;25.0;4;90.00;71.00;2223.;16.5;75;Europe
Volkswagen Dasher;26.0;4;79.00;67.00;1963.;15.5;74;Europe
Volkswagen Dasher;30.5;4;97.00;78.00;2190.;14.1;77;Europe
Volkswagen Dasher (diesel);43.4;4;90.00;48.00;2335.;23.7;80;Europe
Volkswagen Jetta;33.0;4;105.0;74.00;2190.;14.2;81;Europe
Volkswagen Model 111;27.0;4;97.00;60.00;1834.;19.0;71;Europe
Volkswagen Pickup;44.0;4;97.00;52.00;2130.;24.6;82;Europe
Volkswagen Rabbit;29.0;4;90.00;70.00;1937.;14.0;75;Europe
Volkswagen Rabbit;29.0;4;90.00;70.00;1937.;14.2;76;Europe
Volkswagen Rabbit;29.5;4;97.00;71.00;1825.;12.2;76;Europe
Volkswagen Rabbit;29.8;4;89.00;62.00;1845.;15.3;80;Europe
Volkswagen Rabbit;41.5;4;98.00;76.00;2144.;14.7;80;Europe
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
jpbrownjames@cis106:~/Documents/Csv$ sort cars.csv
```

```
Just Right Fruit & Nut;K;C;140;3;1;170;2;20;9;95;100;3;1.3;0.75;36.471512
Total Raisin Bran;G;C;140;3;1;190;4;15;14;230;100;3;1.5;1;28.592785
Nutri-Grain Almond-Raisin;K;C;140;3;2;220;3;21;7;130;25;3;1.33;0.67;40.692320
Muesli Raisins, Peaches, & Pecans;R;C;150;4;3;150;3;16;11;170;25;3;1;1;34.139765
Muesli Raisins, Dates, & Almonds;R;C;150;4;3;95;3;16;11;170;25;3;1;1;37.136863
Mueslix Crispy Blend;K;C;160;3;2;150;3;17;13;160;25;3;1.5;0.67;30.313351
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;rating
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
jpbrownjames@cis106:~/Documents/Csv$ sort -t";" -k4 cereal.csv
```

Question 3

```
1/1 ∨   +   ⏏   ⎚                                                    Tilix: jpbrow

1: jpbrownjames@cis106: ~/Documents/Books ∨

jpbrownjames@cis106:~/Documents/Csv$ cd ../Books/
jpbrownjames@cis106:~/Documents/Books$ ls
bible.txt  dracula.txt  great-expectastions.txt  pride-and-prejudice.txt  war-and-peace.txt
jpbrownjames@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
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
invincibility of the French, and the Minister of War does not even care
to the Emperor Francis; he remembered the Minister of War, the polite
his own house. The Minister of War came up and congratulated him on the
That same night, having taken leave of the Minister of War, Bolkónski
Austrian Council of War at which Suvórov crowed like a cock in reply to
Warmed by the spring sunshine he sat in the calèche looking at the new
Minister of War, Count Arakchéev.
“He is Minister of War, a man trusted by the Emperor, and I need not
of War needlessly deviating.”
War’s anteroom).
which would take them to the Warsaw highroad, and from there they would
the good of that? War is my profession, but his business is to reign
the Minister of War and went to join the army in Moldavia. While in
of War; Count Bennigsen, the senior general in rank; the Grand Duke
without knowing why. War is not courtesy but the most horrible thing in
The Council of War began to assemble at two in the afternoon in the
than that. We took Vienna, Berlin, Madrid, Naples, Rome, Warsaw, all
“The path to Warsaw, perhaps,” Prince Hippolyte remarked loudly and
had first wanted to effect a diversion in Greece and then in Warsaw but
jpbrownjames@cis106:~/Documents/Books$ █
```

```
Secondly, it is assumed that the goal toward which humanity is being led
eastward and collides with a countermovement from the east westward.
said that God, to reward or punish his people, gave Napoleon power and
directed forces. In describing a war or the subjugation of a people, a
from the doctrine of the equality of man, or the very cruel wars and
of a force compelling men to direct their activity toward a certain end.
Napoleon ordered an army to be raised and go to war. We are so
wars, revolutions, and conquests—are presented by these historians
the west at the end of the eighteenth century and their drive eastward
Is the movement of the Russian people eastward to Kazán and Siberia
soon as revolutions, conquests, or civil wars occur—that is, as soon as
as for instance in a war or a revolution, and so without assuming an
When, for instance, we say that Napoleon ordered armies to go to war,
Men uniting in these combinations always assume such relations toward
is it that millions of men commit collective crimes—make war, commit
every bit of it is occasioned by the forward movement of the ship,
same applies to historical events. Why war and revolution occur we do
downwards, a man indubitably believes this and always expects the law
in memory, or what is the same thing the farther I go forward in my
The Austro-Prussian war appears to us undoubtedly the result of the
crafty conduct of Bismarck, and so on. The Napoleonic wars still seem
or mother, or self-sacrifice with the possibility of a reward, is more
with the self-destruction toward which—ever dissecting and dissecting
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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
jpbrownjames@cis106:~/Documents/Books$ grep -i "War" war-and-peace.txt
```

```
1/1 ∨   +   ⏏   ⊐

1: jpbrownjames@cis106: ~/Documents/Books ∨

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

```
1/1 ∨   +   ⬚   ⬚

1: jpbrownjames@cis106: ~/Documents/Books ∨

jpbrownjames@cis106:~/Documents/Books$ grep -ic "War" war-and-peace.txt
1255
jpbrownjames@cis106:~/Documents/Books$ grep -icw "War" war-and-peace.txt
293
jpbrownjames@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
jpbrownjames@cis106:~/Documents/Books$ ▮
```

```
64074:The historians of culture are quite consistent in regard to their
64147:The peasant is irrefutable. He has devised a complete explanation. To
64162:The only conception that can explain the movement of the locomotive is
64165:The only conception that can explain the movement of the peoples is that
64208:The writers of universal histories and of the history of culture are
64282:The science of jurisprudence regards the state and power as the ancients
64404:The leaders, these historians tell us, express the will of the people:
64467:The history of culture explains to us the impulses and conditions of
64484:The life of the nations is not contained in the lives of a few men, for
64486:The theory that this connection is based on the transference of the
64490:The theory of the transference of the collective will of the people to
64496:The theory seems irrefutable just because the act of transference of the
64503:The replies this theory gives to historical questions are like the
64534:The theory of the transference of the will of the people to historic
64565:The historians, in accord with the old habit of acknowledging divine
64713:The soldiers, of whom there are the most, form the lower section of
64907:The presence of the problem of man's free will, though unexpressed, is
64930:The problem is that regarding man as a subject of observation
65020:The actions of men are subject to general immutable laws expressed in
65074:The naturalists and their followers, thinking they can solve this
65097:The subject for history is not man's will itself but our presentation of
65139:The proportion of freedom to inevitability decreases and increases
65177:The first consideration is the clearness of our perception of the man's
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
jpbrownjames@cis106:~/Documents/Books$ grep -nw "^The" war-and-peace.txt ▮
```

```
./dracula.txt:death-beauty. But there was no love in my own heart, nothing but
./dracula.txt:lady whom we love shall again be free. Instead of working wickedness by
./dracula.txt:we love and that the Un-Dead pass away."
./dracula.txt:pleasant, I am sure; for it will tell me the other side of a true love
./dracula.txt:but make your husband love you the more, and all us, your friends, more
./dracula.txt:honour you--as well as more esteem and love." She took it back with
./dracula.txt:us who did love her. But that is gone; and we must so work, that other
./dracula.txt:preying on the bodies and the souls of those we love best. To us for
./dracula.txt:song of birds, his music and his love, lie far behind. You others are
./dracula.txt:itself; it does not even need a woman's love to hear its music.
./dracula.txt:By all you hold sacred--by all you hold dear--by your love that is
./dracula.txt:love and from the good, good wishes of those other strong men.
./dracula.txt:love Mina, I know. Oh, do something to save her. It cannot have gone too
./dracula.txt:harm to any that I love, I shall die!"
./dracula.txt:Mina, my dear, my dear, may we who love you be there to see, when that
./dracula.txt:the holiest love was the recruiting sergeant for their ghastly ranks.
./dracula.txt:girls that you all love are mine already; and through them you and
./dracula.txt:so full of love and tenderness, "Jonathan dear, and you all my true,
./dracula.txt:one is my poor wronged darling. I love her a thousand times more for her
./dracula.txt:for the safety of one we love--for the good of mankind, and for the
./dracula.txt:friends who love me. But death is not all. I cannot believe that to die
./dracula.txt:towards those whom they love, in such times of sore trial! And oh, my
./dracula.txt:how I love and honour you, when a word for your good, spoken more
./dracula.txt:woman open and look love, and the voluptuous mouth present to a
./dracula.txt:some of my sex to love and to protect one of hers, made my head whirl
jpbrownjames@cis106:~/Documents/Books$ grep -Rwi "love" ./
```

```
1/1 ∨  +  ⬚  ⬚                                                    Tilix: jpbrownjames@c

1: jpbrownjames@cis106: ~/Documents/Books ∨

pbrownjames@cis106:~/Documents/Books$ grep -nR "^l...d" ./
/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
/war-and-peace.txt:22829:lie down in my room and have a rest."
/war-and-peace.txt:23565:lived for myself alone while others live so apart from it, but so that
/war-and-peace.txt:25906:liked her voice. She asked this and then became confused, feeling that
/war-and-peace.txt:25908:liked her singing as he liked everything she did.
/war-and-peace.txt:26188:loved.) "I... but no, I will talk to you later on," and with a
/war-and-peace.txt:26971:loved his wife, she died, but that was not enough: he wanted to bind
/war-and-peace.txt:28969:lived in animals, and will go back into animals again."
/war-and-peace.txt:28985:lived for a whole eternity."
/war-and-peace.txt:30754:loved her only, and was to come one of these days and take her. She
/war-and-peace.txt:32380:liked upsetting a driver or running down a pedestrian, and flying at
/war-and-peace.txt:40081:lay down on his bed groaning and loudly exclaimed, 'My God!' Why didn't
/war-and-peace.txt:40681:loved him and respected him, and sympathize with you with all my heart."
/war-and-peace.txt:44670:lived. But now it is too late. I know it!"
/war-and-peace.txt:48561:lined with fox fur, that had once been smart, and dirty hempen convict
/war-and-peace.txt:48690:livid face stained with blood and dust.
/war-and-peace.txt:50235:loved that man. What has become of him? Is he alive?...
/war-and-peace.txt:51651:loved face, a new life force took possession of her and compelled her to
/war-and-peace.txt:51658:lived appeared on the surface. All her inward labor, her dissatisfaction
```

```
./dracula.txt:dear Mina and me.
./dracula.txt:doubtless in winter and when the snow melts--the horsemen may not have
./dracula.txt:danger--more than need be; but we are in God's hands.
./dracula.txt:darling suffered so much. God grant that we may be guided aright, and
./dracula.txt:death, or more than these, and we must not flinch.
./dracula.txt:did have hunger and appeased it, I could not waken her--even for food. I
./dracula.txt:down in her place. Then, looking at me with open eyes, as of one waked
./dracula.txt:danger to her body, yet her soul was safe!
./dracula.txt:dangers to all of us, and from all sides. The horses are nearly ready,
./dracula.txt:done!" Down came another blinding rush of driving snow, and the whole
./dracula.txt:dissolution, there was in the face a look of peace, such as I never
./dracula.txt:disappearance of the dead man, turned, without a word, and rode away as
./dracula.txt:day as that on which Quincey Morris died. His mother holds, I know, the
./dracula.txt:do practically ANYTHING in the United States with eBooks not protected
./dracula.txt:distribution of electronic works, by using or distributing this work
./dracula.txt:destroy all copies of Project Gutenberg™ electronic works in your
./dracula.txt:displaying or creating derivative works based on the work as long as
./dracula.txt:distributing or creating derivative works based on this work or any
./dracula.txt:derived from texts not protected by U.S. copyright law (does not
./dracula.txt:defect in this electronic work within 90 days of receiving it, you can
./dracula.txt:damages. If any disclaimer or limitation set forth in this agreement
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./dracula.txt:distributed Project Gutenberg™ eBooks with only a loose network of
jpbrownjames@cis106:~/Documents/Books$ grep -R "^d[aeiou]..." ./
```

```
1/1 ⌄    +    ⬚    ⬚

1: jpbrownjames@cis106: ~/Documents/Books ⌄

jpbrownjames@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
jpbrownjames@cis106:~/Documents/Books$
```