

Lab 7 Submission

Question 1

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1/1 v + [ ] [ ]
Tilix: savillarreal@cis106desktop: ~/Documents/Csv
1: savillarreal@cis106desktop: ~/Documents/Csv$ cat cereal.csv
name;nfrr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cup;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;O;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;19.023573
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;35.702791
Count Chocula;G;C;110;1;1;180;0;12;13;05;25;2;1;1;22.396513
Cracklin' Oat Bran;K;C;110;3;1;140;4;10;7;160;25;3;1;0.5;40.448772
2: savillarreal@cis106desktop: ~/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;49.707445
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
3: savillarreal@cis106desktop: ~/Documents/Csv$ cat -ne cereal.csv
1 name;nfrr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cup;rating;MS
2 String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float;MS
3 100% Bran;N;C;70;4;1;130;10;5;6;280;25;3;1;0.33;68.402973;MS
4 100% Natural Bran;Q;C;120;3;5;15;2;8;8;135;0;3;1;1;33.983679;MS
5 All-Bran;K;C;70;4;1;260;9;7;5;320;25;3;1;0.33;59.425505;MS
6 All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.704912;MS
7 Almond Delight;R;C;110;2;2;200;1;14;8;-1;25;3;1;0.75;34.384843;MS
8 Apple Cinnamon Cheerios;G;C;110;2;2;180;1.5;10.5;10;70;25;1;1;0.75;29.509541;MS
9 Apple Jacks;K;C;110;2;0;125;1;11;14;30;25;2;1;1;33.174094;MS
10 Basic 4;G;C;130;3;2;210;2;18;8;100;25;3;1.33;0.75;37.038562;MS
11 Bran Chex;R;C;90;2;1;200;4;15;6;125;25;1;1;0.67;49.120253;MS
12 Bran Flakes;P;C;90;3;0;210;5;13;5;190;25;3;1;0.67;53.313813;MS
13 Cap'n Crunch;O;C;120;1;2;220;0;12;12;35;25;2;1;0.75;18.042851;MS
14 Cheerios;G;C;110;6;2;290;2;17;1;105;25;1;1;1.25;50.764999;MS
15 Cinnamon Toast Crunch;G;C;120;1;3;210;0;13;9;45;25;2;1;0.75;19.023573;MS
16 Clusters;G;C;110;3;2;140;2;13;7;105;25;3;1;0.5;40.400208;MS
17 Cocoa Puffs;G;C;110;1;1;180;0;12;13;55;25;2;1;1.22.736446;MS
18 Corn Chex;R;C;110;2;0;280;0;22;3;25;25;1;1;1;41.445019;MS
19 Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324;MS
20 Corn Pops;K;C;110;1;0;90;1;13;12;20;25;2;1;1;35.702791;MS
21 Count Chocula;G;C;110;1;1;180;0;12;13;05;25;2;1;1;22.396513;MS
22 Cracklin' Oat Bran;K;C;110;3;1;140;4;10;7;160;25;3;1;0.5;40.448772;MS
4: savillarreal@cis106desktop: ~/Documents/Csv$ head -2 cereal.csv
name;nfrr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cup;rating
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
savillarreal@cis106desktop: ~/Documents/Csv$
5: savillarreal@cis106desktop: ~/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
savillarreal@cis106desktop: ~/Documents/Csv$

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Question 2

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1/1 v + [ ] [ ]
Tilix: savillarreal@cis106desktop: ~/Documents/Csv
1: savillarreal@cis106desktop: ~/Documents/Csv$ savillarreal@cis106desktop: ~/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
2: savillarreal@cis106desktop: ~/Documents/Csv$ savillarreal@cis106desktop: ~/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
3: savillarreal@cis106desktop: ~/Documents/Csv$ savillarreal@cis106desktop: ~/Documents/Csv$ cut -d";" -f1,3 --output-delimiter=" " 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
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
Buick Wildcat = 4
4: savillarreal@cis106desktop: ~/Documents/Csv$ savillarreal@cis106desktop: ~/Documents/Csv$ sort cars.csv
AMC Ambassador Brougham;13.0;8;360.0;175.0;3821.1;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;3672.1;11.5;72;US
AMC Concord;19.4;6;232.0;90.00;3210.1;17.2;78;US
AMC Concord;24.3;4;151.0;90.00;3003.1;20.1;80;US
AMC Concord d/L;18.1;6;258.0;120.0;3410.1;15.1;78;US
AMC Concord DL;23.0;4;151.0;90.00;3035.1;20.5;82;US
AMC Concord DL 6;20.2;6;232.0;90.00;3265.1;18.2;79;US
AMC Gremlin;18.0;6;232.0;100.0;2789.1;15.0;73;US
5: savillarreal@cis106desktop: ~/Documents/Csv$ savillarreal@cis106desktop: ~/Documents/Csv$ sort -nt";" -k4 cereal.csv
name;nfrr;type;calories;protein;fat;sodium;fiber;carbo;sugars;potass;vitamins;shelf;weight;cup;rating
String;Categorical;Categorical;Int;Int;Int;Int;Float;Float;Int;Int;Int;Int;Float;Float;Float
All-Bran with Extra Fiber;K;C;50;4;0;140;14;8;0;330;25;3;1;0.5;93.704912
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
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
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
Nutri-grain Wheat;K;C;90;3;0;170;3;18;2;90;25;3;1;1;59.642837
Raisin Squares;K;C;90;2;0;0;2;15;6;110;25;3;1;0.5;55.333142
Shredded Wheat 'n Bran;N;C;90;3;0;0;4;19;0;140;0;1;1;0.67;74.472949
Shredded Wheat spoon size;N;C;90;3;0;0;3;20;0;120;0;1;1;0.67;72.801787
Strawberry Fruit Wheats;N;C;90;2;0;15;3;15;5;90;25;2;1;1;59.363993
Corn Flakes;K;C;100;2;0;290;1;21;2;35;25;1;1;1;45.863324
Cream of Wheat (Quick);N;H;100;3;0;0;0;1;21;0.1;10;2;1;1;64.533816
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;44.330056
Frosted Mini Wheats;K;C;100;3;0;0;3;14;7;100;25;2;1;0.8;98.345141

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Question 3.1

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1/3 v + [ ] [ ]
Tilix: savillarreal@cis106desktop: ~/Documents/Books
1: savillarreal@cis106desktop: ~/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 Suворov crowed like a cock in reply to
warned 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).

2: savillarreal@cis106desktop: ~/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.
* God has given it to me, let him who touches it beware!
more animated. "And believe me, they are reaping the reward of their
through his lorgnette, suddenly turned completely round toward the
Prince Andrew, who had evidently wished to tone down the awkwardness of
his kindly, simple, and modest expression. Anna Pávlovna turned toward
awkwardness or intentionally (no one could have said which) after the
to tell you. There is a war now against Napoleon. If it were a war for
wars," he said.
"Well, why are you going to the war?" asked Pierre.
wants to go to the war," replied Pierre, addressing the princess
without wars. How is it that we women don't want anything of the kind

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Question 3.2

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2/2 v + [ ] [ ]
Tilix: savillarreal@cis106desktop: ~/Documents/Books
1: savillarreal@cis106desktop: ~/Documents/Books$ grep -R "love"
pride-and-prejudice.txt:by allowance" and "loving with personal love." This distinction applies
pride-and-prejudice.txt:to their best work than in the case of those others who are loved "by
pride-and-prejudice.txt:proper thing to love them. And in the sect—fairly large and yet
pride-and-prejudice.txt:All the minor passages—the Loves of Jane and Bingley, the advent of Mr.
pride-and-prejudice.txt:aversion to actual love, I do not know whether the all-grasping hand of
pride-and-prejudice.txt:this 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
pride-and-prejudice.txt:anybody who can read between lines will not find the lovers'
pride-and-prejudice.txt:ladies with whom it might be a pleasure to fall in love; there are at
pride-and-prejudice.txt:Grant. I should have been most in love with Beatrix and Argemone; I
pride-and-prejudice.txt:"So much love and eloquence"
pride-and-prejudice.txt:may fall in love with one of them, and therefore you must visit him as
pride-and-prejudice.txt:persuade you at last. I was sure you loved your girls too well to
pride-and-prejudice.txt:for your sakes we would do anything. Lydia, my love, though you are
pride-and-prejudice.txt:dancing was a certain step towards falling in love; and very lively
pride-and-prejudice.txt:way to be very much in love; but she considered with pleasure that it
pride-and-prejudice.txt:very few of us who have heart enough to be really in love without
pride-and-prejudice.txt:in love as much as she chooses."
pride-and-prejudice.txt:imagination is very rapid; it jumps from admiration to love, from love
pride-and-prejudice.txt:Jane, make haste and tell us; make haste, my love."
pride-and-prejudice.txt:brother Gardiner's in town so much in love with her, that my
pride-and-prejudice.txt:discovered the efficacy of poetry in driving away love!
pride-and-prejudice.txt:"I have been used to consider poetry as the food of love," said Darcy.
pride-and-prejudice.txt:"Of a fine, stout, healthy love it may. Everything nourishes what is
pride-and-prejudice.txt:be a great loss to me to have many such acquaintance. I dearly love a
pride-and-prejudice.txt:to-day. Lydia, my love, ring the bell. I must speak to Hill this
pride-and-prejudice.txt:His plan did not vary on seeing them. Miss Bennet's lovely face
pride-and-prejudice.txt:the effects of your loveliness and amiable qualifications. As I must,
pride-and-prejudice.txt:shall choose to attribute it to your wish of increasing my love by
pride-and-prejudice.txt:successful love; for Mrs. Bennet, having dangled about in the vestibule
pride-and-prejudice.txt:in love with you and wants him to marry Miss Darcy. She follows him to
pride-and-prejudice.txt:is not such a simpleton. Could she have seen half as much love in Mr.
pride-and-prejudice.txt:of being in love with you, he is very much in love with her friend."
pride-and-prejudice.txt:she dared to hope that so much love and eloquence awaited her there.
pride-and-prejudice.txt: "So much love and eloquence"
pride-and-prejudice.txt:publish his prosperous love.
pride-and-prejudice.txt:The possibility of Mr. Collins's fancying himself in love with her
pride-and-prejudice.txt:while her health was so indifferent, and lovers were of all people the
pride-and-prejudice.txt:dishonourable to the stability of her lover, she could not prevent its
pride-and-prejudice.txt:and, luckily for the others, the business of love-making relieved them
pride-and-prejudice.txt:you. I feel as if I had never done you justice, or loved you as you
pride-and-prejudice.txt:whom I really love, and still fewer of whom I think well. The more I see
pride-and-prejudice.txt:known much longer than they have known me; no wonder if they love
pride-and-prejudice.txt:day, "your sister is crossed in love, I find. I congratulate her. Next
pride-and-prejudice.txt:to being married, a girl likes to be crossed in love a little now and
pride-and-prejudice.txt:after a week spent in professions of love and schemes of felicity, Mr.
pride-and-prejudice.txt: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 man."
pride-and-prejudice.txt:1403:dark. There is so much of gratitude or vanity in almost every
pride-and-prejudice.txt:1035:dirty weather, and by herself, was almost incredible to Mrs. Hurst and
pride-and-prejudice.txt:1232:Darcy only smiled; and the general pause which ensued made Elizabeth
pride-and-prejudice.txt:1251:Darcy had much better finish his letter."
pride-and-prejudice.txt:1258:dare."
pride-and-prejudice.txt:1269:door. He then sat down by her, and talked scarcely to anyone else.
pride-and-prejudice.txt:1270:Darcy did not wish for cards, and Mr. Hurst soon found even his open
pride-and-prejudice.txt:1210:Darcy's progress through his book, as in reading her own; and she was
pride-and-prejudice.txt:1271:day."
pride-and-prejudice.txt:1273:Darcy may hug himself."
pride-and-prejudice.txt:1302:doubt her seeing them all in due time well disposed of in marriage. This
pride-and-prejudice.txt:1310:done—done while Mrs. Bennet was stirring the fire. Elizabeth, equally
pride-and-prejudice.txt:1374:Darcy is."
pride-and-prejudice.txt:1391:dance.
pride-and-prejudice.txt:1392:doubt of his being present had never occurred to her. The certainty of
pride-and-prejudice.txt:1403:dance, and you ought to make some kind of remark on the size of the
pride-and-prejudice.txt:1404:Darcy made no answer, and seemed desirous of changing the subject. At
pride-and-prejudice.txt:1409:Darcy, he stopped, with a bow of superior courtesy, to compliment him on
pride-and-prejudice.txt:1413:Darcy's steward. Let me recommend you, however, as a friend, not to give
pride-and-prejudice.txt:1418:Darcy." She then sought her eldest sister, who had undertaken to make
pride-and-prejudice.txt:1459:doing you any disservice, rather adds to your other perfections. You
pride-and-prejudice.txt:1509:Darcy for herself, she would have ordered her wedding clothes. But the
pride-and-prejudice.txt:1540:Darcy and the amusements of London, might be too much, she feared, for
pride-and-prejudice.txt:1580:day, "your sister is crossed in love, I find. I congratulate her. Next
pride-and-prejudice.txt:1573:done, she had a less active part to play. It became her turn to listen.
pride-and-prejudice.txt:1609:Darcy's sister, as, by Wickham's account, she would make him abundantly
pride-and-prejudice.txt:1619:door, Jane was at a drawing-room window watching their arrival; when
pride-and-prejudice.txt:1637:doubt not but you will be honoured with some portion of her notice when
pride-and-prejudice.txt:1676:doing it should be given so soon was such an instance of Lady
pride-and-prejudice.txt:1689:doors, to recommend their being quick, as Lady Catherine very much
pride-and-prejudice.txt:1696:dared to trifle with so much dignified impertinence.
pride-and-prejudice.txt:1701:Darcy smiled and said, "You are perfectly right. You have employed your
pride-and-prejudice.txt:1707:Darcy only, entered the room.
pride-and-prejudice.txt:1746:Darcy, whose pride, she was convinced, would receive a deeper wound from
pride-and-prejudice.txt:1744:done, however, and it was done for the best. On this subject I have
pride-and-prejudice.txt:1792:doubt, as he was well assured that I had no other person to provide for,
pride-and-prejudice.txt:1826:Darcy of Pemberley, and Lady Anne, could not have appeared with
pride-and-prejudice.txt:1863:Darcy and herself.
pride-and-prejudice.txt:1869:Darcy's, but you shall do as you choose."
pride-and-prejudice.txt:1911:Darcy's, in crayons, whose subjects were usually more interesting, and
pride-and-prejudice.txt:1909:doubt; but that the gentleman was overflowing with admiration was
pride-and-prejudice.txt:10160:Darcy's opinion, and, perhaps, to remind the latter of all the follies
pride-and-prejudice.txt:10307:Darcy was fixed in astonishment

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Question 3.3

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