

Homework 5

Group 1

Contents

1	Introduction	2
2	Statement of the Problem	2
3	Data Exploration	2
3.1	Variables Explained	2
3.2	Variables Summary Statistics	3
3.3	Imputing Missing Values	4
3.4	Correlation of Variables	6
4	Data Transformation	7
4.1	Outliers Treatment	7
4.2	BoxCox Transformations	9
5	Models Built	13
5.1	Poisson Regression Models	13
5.2	Negative Binomial Regression Models	21
5.3	Multiple Linear Regression	31
6	Selected Model	37
6.1	Predictions	38
7	Appendix A	70
7.1	Session Info	70
7.2	Data Dictionary	70
7.3	R source code	71

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1 Introduction

The wine industry was valued at \$257.5 billion in 2012 and is predicted to be valued at \$303.6 billion by 2016.¹ As wine is a consumer product, accommodating consumer preference is critical to maintaining a competitive advantage. By understanding the factors involved in wine sales we can better understand consumer behavior and adjust our strategies accordingly.

2 Statement of the Problem

The purpose of this report is to develop statistical models to make inference into the factors associated with the number of cases of wine sold.

3 Data Exploration

3.1 Variables Explained

The variables provided in the Wine Training Data Set are explained below:

Variable Code	Definition
INDEX	Identification Variable (do not use)
TARGET	Number of Cases Purchased
AcidIndex	Proprietary method of testing total acidity of wine by using a weighted average
Alcohol	Alcohol Content
Chlorides	Chloride content of wine
CitricAcid	Citric Acid Content
Density	Density of Wine
FixedAcidity	Fixed Acidity of Wine
FreeSulfurDioxide	Sulfur Dioxide content of wine
LabelAppeal	Marketing Score indicating the appeal of label design for consumers. High numbers suggest customers like the label design. Negative numbers suggest customers don't like the design.
ResidualSugar	Residual Sugar of wine
STARS	Wine rating by a team of experts. 4 Stars = Excellent, 1 Star = Poor
Sulphates	Sulfate content of wine
TotalSulfurDioxide	Total Sulfur Dioxide of Wine
VolatileAcidity	Volatile Acid content of wine
pH	pH of wine

¹"Research and Markets: Wine: 2012 Global Industry Almanac - The Global Wine Market Grew by 3.1% in 2011 to Reach a Value of \$257.5 Billion." Research and Markets: Wine: 2012 Global Industry Almanac - The Global Wine Market Grew by 3.1% in 2011 to Reach a Value of \$257.5 Billion | Business Wire. N.p., 21 May 2012. Web. 20 Nov. 2016.

3.2 Variables Summary Statistics

3.2.1 Discrete Variables

Interestingly, we can see some general sense of the make up of our data set. In this set, most wines sell between 3 and 5 cases, have no label appeal, and very few received 4 stars with most wines receiving 2 or 1 stars. Additionally, we should note that 21.4% of our wines had no case sales.

Table 2: Wine Training Data Table of Discrete Variables

Variable	Levels	n	%	$\sum\%$
TARGET	0	2734	21.4	21.4
	1	244	1.9	23.3
	2	1091	8.5	31.8
	3	2611	20.4	52.2
	4	3177	24.8	77.0
	5	2014	15.7	92.8
	6	765	6.0	98.8
	7	142	1.1	99.9
	8	17	0.1	100.0
all		12795	100.0	
LabelAppeal	-2	504	3.9	3.9
	-1	3136	24.5	28.5
	0	5617	43.9	72.3
	1	3048	23.8	96.2
	2	490	3.8	100.0
	all		12795	100.0
STARS	1	3042	32.2	32.2
	2	3570	37.8	70.1
	3	2212	23.4	93.5
	4	612	6.5	100.0
	all		9436	100.0

3.2.2 Continous Variables

We see that Density is a very narrow measurement, the minimum value is 0.9 and the maximum is 1.1. The remaining continuous variables appear to have a larger range of variability, with the largest being TotalSulfurDioxide which has a range from -823 to 1057. In our models, this variability will provide some insights to our coefficients and the impact to the dependent variable.

Table 3: Wine Training Data Table of Continuous Variables

Variable	n	Min	q ₁	\tilde{x}	\bar{x}	q ₃	Max	s	IQR	#NA
FixedAcidity	12795	-18.1	5.2	6.9	7.1	9.5	34.4	6.3	4.3	0
VolatileAcidity	12795	-2.8	0.1	0.3	0.3	0.6	3.7	0.8	0.5	0
CitricAcid	12795	-3.2	0.0	0.3	0.3	0.6	3.9	0.9	0.5	0
ResidualSugar	12179	-127.8	-2.0	3.9	5.4	15.9	141.2	33.7	17.9	616
Chlorides	12157	-1.2	0.0	0.0	0.1	0.2	1.4	0.3	0.2	638
FreeSulfurDioxide	12148	-555.0	0.0	30.0	30.8	70.0	623.0	148.7	70.0	647
TotalSulfurDioxide	12113	-823.0	27.0	123.0	120.7	208.0	1057.0	231.9	181.0	682
Density	12795	0.9	1.0	1.0	1.0	1.0	1.1	0.0	0.0	0
pH	12400	0.5	3.0	3.2	3.2	3.5	6.1	0.7	0.5	395
Sulphates	11585	-3.1	0.3	0.5	0.5	0.9	4.2	0.9	0.6	1210
Alcohol	12142	-4.7	9.0	10.4	10.5	12.4	26.5	3.7	3.4	653

3.3 Imputing Missing Values

In order to address the missing values in our variables we used a non-parametric imputation method (Random Forest) using the `missForest` package. The function is particularly useful in that it can handle any type of input data and it will make as few assumptions about the structure of the data as possible.²

**Table 4 : Imputed Descriptive Statistics
13 Variables 12795 Observations**

FixedAcidity

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	470	1	7	7	-4	-1	5	7	10	16	18
lowest : -18.1 -18.0 -17.7 -17.5 -17.4, highest: 32.4 32.5 32.6 34.1 34.4												

VolatileAcidity

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	815	1	0.3	0.8	-1.0	-0.7	0.1	0.3	0.6	1.4	1.6
lowest : -2.790 -2.750 -2.745 -2.730 -2.720, highest: 3.500 3.550 3.565 3.590 3.680												

CitricAcid

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	602	1	0.3	0.9	-1.16	-0.84	0.03	0.31	0.58	1.43	1.79
lowest : -3.24 -3.16 -3.10 -3.08 -3.06, highest: 3.63 3.68 3.70 3.77 3.86												

ResidualSugar

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	2685	1	5	34	-52.0	-38.4	-0.5	4.1	15.0	48.9	62.1
lowest : -127.80 -127.10 -126.20 -126.10 -125.70 highest: 136.50 137.60 138.00 140.65 141.15												

Chlorides

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	2285	1	0.05	0.3	-0.48	-0.36	-0.01	0.05	0.13	0.47	0.59
lowest : -1.171 -1.170 -1.158 -1.156 -1.155, highest: 1.260 1.261 1.270 1.275 1.351												

FreeSulfurDioxide

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	1626	1	31	150	-220	-165	3	30	66	223	281
lowest : -555 -546 -536 -535 -532, highest: 613 617 618 622 623												

TotalSulfurDioxide

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	2039	1	121	238	-266	-175	33	123	200	412	507
lowest : -823 -816 -793 -781 -779, highest: 1032 1041 1048 1054 1057												

Density

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	5933	1	1	0.03	0.9	1.0	1.0	1.0	1.0	1.0	1.0
lowest : 0.88809 0.88949 0.88978 0.88983 0.89167 highest: 1.09658 1.09679 1.09695 1.09791 1.09924												

pH

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	863	1	3	0.7	2	2	3	3	3	4	4
lowest : 0.48 0.53 0.54 0.58 0.59, highest: 5.91 5.94 6.02 6.05 6.13												

²Stekhoven, Daniel J., and Peter B?hlmann. "MissForest-non-parametric missing value imputation for mixed-type data." Bioinformatics 28.1 (2012): 112-118.

Sulphates

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95
12795	0	1695	1	0.5	0.9	-1.0	-0.6	0.3	0.5	0.8	1.7	2.1

lowest : -3.13 -3.12 -3.10 -3.07 -3.03, highest: 4.11 4.16 4.19 4.21 4.24

Alcohol

n	missing	distinct	Info	Mean	Gmd	.05	.10	.25	.50	.75	.90	.95	
12795	0	1036	1	10	4	.05	.4	.6	.9	.10	.12	.15	.17

lowest : -4.7 -4.5 -4.4 -4.3 -4.1, highest: 25.4 25.6 26.0 26.1 26.5

LabelAppeal

n	missing	distinct	Info	Mean	Gmd
12795	0	5	0.887	-0.009	1

lowest : -2 -1 0 1 2, highest: -2 -1 0 1 2

-2 (504, 0.039), -1 (3136, 0.245), 0 (5617, 0.439), 1 (3048, 0.238), 2 (490, 0.038)

STARS

n	missing	distinct
12795	0	4

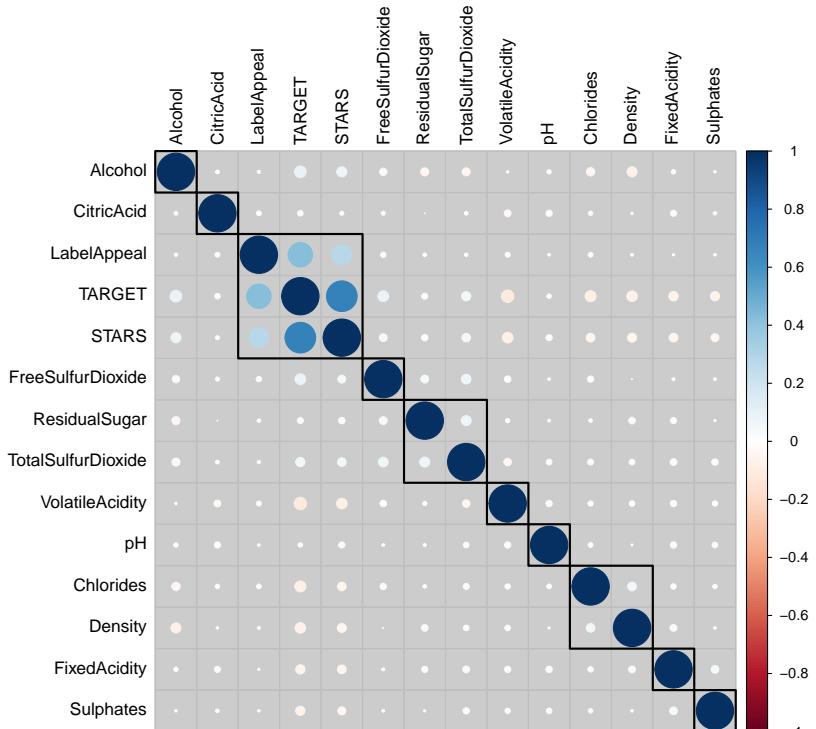
1 (5305, 0.415), 2 (4569, 0.357), 3 (2309, 0.180), 4 (612, 0.048)

3.4 Correlation of Variables

3.4.1 Correlation Matrix

If we modify our data frame to a matrix in our evaluation data set we can further plot a correlation matrix. There are surprisingly few interesting correlations in the data, but the lack of correlation in the data set is in itself interesting.

- STARS has the most positive correlation and strongest correlation with our dependent variable TARGET. It is intuitive that the greater the STARS value the more cases our wine would sell.
- LabelAppeal is the second most correlated with our dependent variable to our dependent variable. It is interesting that the two most correlated variables have less to do with wine quality and more to do with the appearance of a sophisticated wine.
- The lack of strong correlations is interesting in itself. It is concerning that most variables have nearly no correlation with our dependent variable but represent the actual quality of the wine. We see that public perception of wine is more important than the actual quality of the wine as measured by these variables.

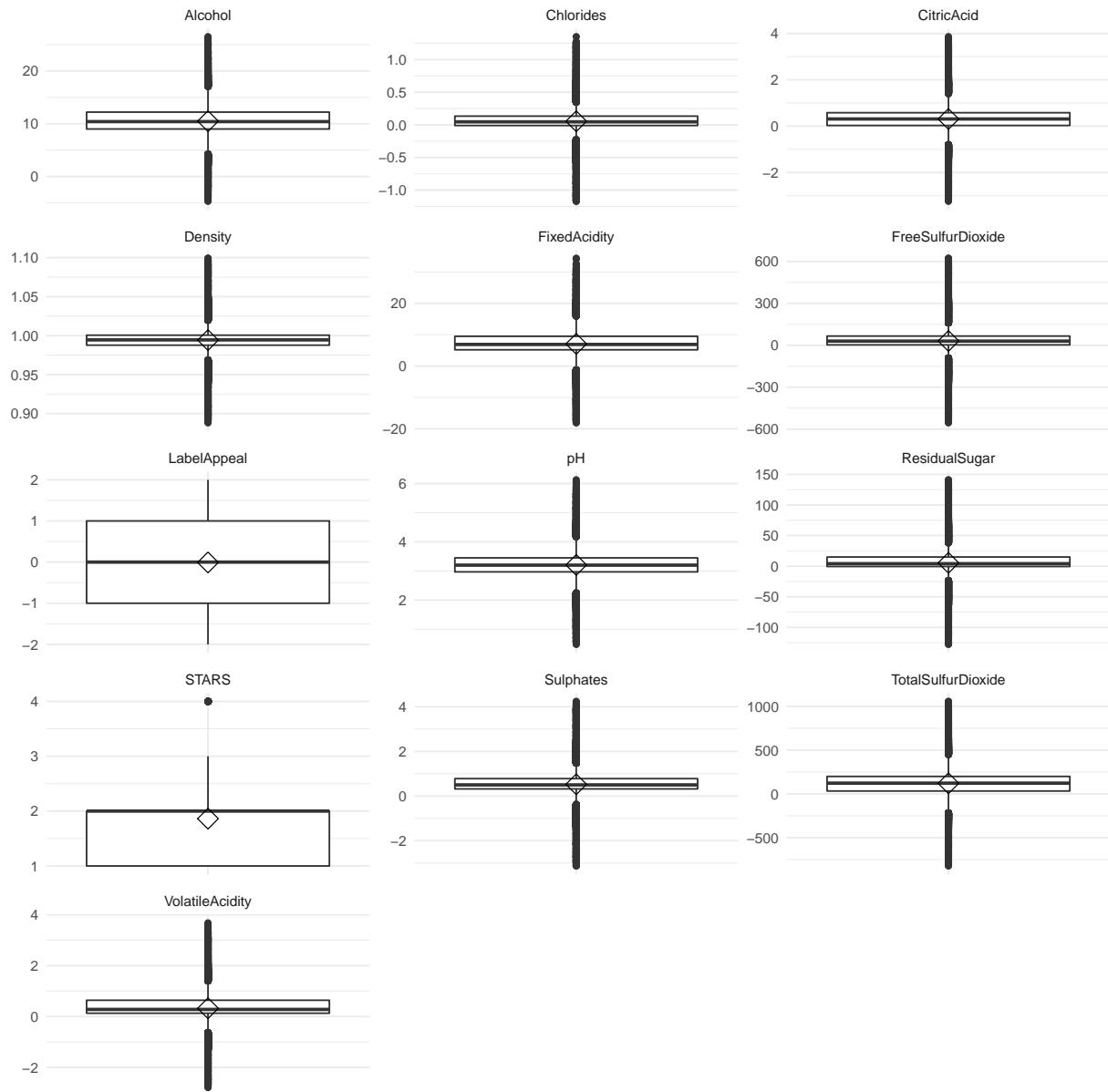


4 Data Transformation

4.1 Outliers Treatment

4.1.1 Box Plots of Variables for Winsorizing

Box Plots provide a visualization of the quartiles and outliers of our data set.³ Using the box plots, we can conclude that the variables to be winsorized are Free Sulfur Dioxide, Residual Sugar, and Total Sulfur Dioxide.



³"Box Plot." Wikipedia. Wikimedia Foundation, n.d. Web. 24 Nov. 2016.

4.1.2 Winsorizing

We chose winsorizing as the method to address outliers. Instead of trimming values, winsorizing uses the interquartile range to replace values that are above or below the interquartile range multiplied by a factor. Those values above or below the range multiplied by the factor are then replaced with max and min value of the interquartile range. Using the factor 2.2 for winsorizing outliers is a method developed by Hoaglin and Iglewicz and published Journal of American Statistical Association in 1987⁴.

The below table is the summary results of the winsorizing of the data.

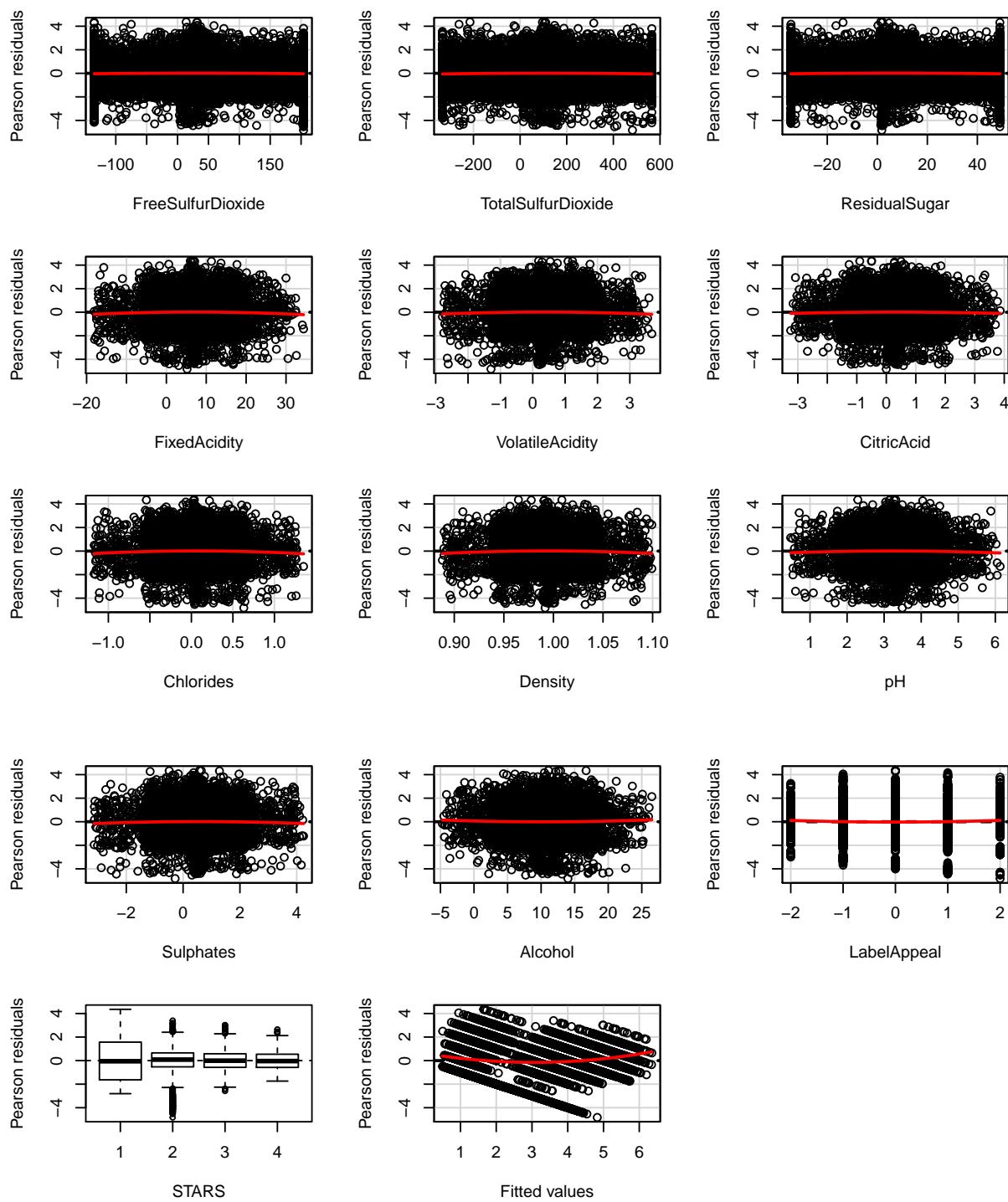
Table 4:

Statistic	N	Mean	St. Dev.	Min	Max
FreeSulfurDioxide	12,796	31.978	99.033	-135.000	204.000
TotalSulfurDioxide	12,796	120.521	203.181	-333.000	565.000
ResidualSugar	12,796	5.927	23.816	-34.600	49.100
TARGET	12,796	3.029	1.926	0	8
FixedAcidity	12,796	7.075	6.317	-18.100	34.400
VolatileAcidity	12,796	0.324	0.784	-2.790	3.680
CitricAcid	12,796	0.308	0.862	-3.240	3.860
Chlorides	12,796	0.055	0.313	-1.171	4.000
Density	12,796	0.994	0.032	0.888	3.000
pH	12,796	3.208	0.670	0.480	6.130
Sulphates	12,796	0.527	0.888	-3.130	4.240
Alcohol	12,796	10.489	3.636	-4.700	26.500
LabelAppeal	12,796	-0.009	0.891	-2	3

⁴Hoaglin, D. C., and Iglewicz, B. (1987), Fine tuning some resistant rules for outlier labeling, Journal of American Statistical Association, 82, 1147-1149.

4.2 BoxCox Transformations

Even after Winsorization we see non-constant variance in the Pearson Residuals for `FreeSulferDioxide`, `TotalSulfurDioxide`, and `ResidualSugar`. The Box-Cox evaluation was completed on these variables, based on the residual plots. In the residual plots, these three variables showed a great deal of non-constant variance because the plots were hyperbolic-shaped.



```
##          Test stat Pr(>|t|)  
## FreeSulfurDioxide     -1.892   0.058  
## TotalSulfurDioxide    -1.751   0.080  
## ResidualSugar        -2.101   0.036  
## FixedAcidity         -1.881   0.060  
## VolatileAcidity      -1.694   0.090  
## CitricAcid           -1.092   0.275  
## Chlorides             -2.370   0.018  
## Density               -2.286   0.022  
## pH                    -1.500   0.134  
## Sulphates             -1.616   0.106  
## Alcohol                1.408   0.159  
## LabelAppeal            3.071   0.002  
## STARS                  NA      NA  
## Tukey test              17.998  0.000
```

4.2.1 Determining BoxCox Transformations

Using the `BoxCox.lambda` function from the `forecast` package we are able to determine our necessary transformations to our independent variables.

λ	Variables
1.22449234379866	Free Sulfur Dioxide
1.0182875042235	Total Sulfur Dioxide
1.18389893233879	Residual Sugar

Utilizing transformations based on the lambda value of the BoxCox and rounding to the nearest tenth we further transform our independent variables for our regression models. We see that the `TotalSulfurDioxide` variable does not require further transformation

Box-Cox Transformations ⁵	
λ	Y'
0	$\log(Y)$
.25	$\sqrt[4]{Y}$
0.5	$Y^{0.5} = \sqrt{(Y)}$
1	$Y^1 = Y$
1.25	$Y^{1.25}$

variable	variable transformation
ResidualSugar	$ResidualSugar^{1.25}$
FreeSulfurDioxide	$FreeSulfurDioxide^{1.25}$

⁵Osborne, Jason W. "Improving your data transformations: Applying the Box-Cox transformation." Practical Assessment, Research & Evaluation 15.12 (2010): 1-9.

5 Models Built

5.1 Poisson Regression Models

First, we investigate the unconditional variance is slightly > unconditional mean. Which we do see in the below table so there may be some over-dispersion.

mean	var
3.029074	3.710895

5.1.1 Poisson Regression Model 1

We build out first Poisson Regression model but we need to verify the confidence levels are appropriate. After producing the Confidence level for ResidualSugar we see it runs through 1 and its P(z) value is clearly not significant. Based on both items we can remove ResidualSugar from the model.

Table 7: Poisson Regression Model 1

<i>Dependent variable:</i>	
	TARGET
Constant	0.406*** (0.018)
STARS2	0.825*** (0.013)
STARS3	1.064*** (0.015)
STARS4	1.229*** (0.021)
Alcohol	0.005*** (0.001)
ResidualSugar	0.00005 (0.0002)
Observations	12,795
Log Likelihood	-23,658.340
Akaike Inf. Crit.	47,328.690
Residual Deviance	15,374.670 (df = 12789)
Null Deviance	22,860.890 (df = 12794)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 8: Confidence intervals

	2.5%	97.5%
(Intercept)	1.5	1.447
STARS2	2.283	2.224
STARS3	2.898	2.816
STARS4	3.419	3.284
Alcohol	1.005	1.002
ResidualSugar	1	0.9997

We removed ResidualSugar and Model with the independent variables STARS and Alcohol. We can see how great the STARS variable has on our model, 2 STARS is 2.28 times wine case sales when compared to one STAR. Furthermore, 3 Stars will have wine case sales of 2.90 times more than one STAR, and four STARS will be 3.42 times more than one STAR. Alcohol = For one unit increase in Alcohol, Wine sales will be 1.004 times more

Table 9: Poisson Regression Model 1 without ResidualSugar

Dependent variable:	
	TARGET
Constant	0.406*** (0.018)
STARS2	0.825*** (0.013)
STARS3	1.064*** (0.015)
STARS4	1.229*** (0.021)
Alcohol	0.005*** (0.001)
Observations	12,795
Log Likelihood	-23,658.390
Akaike Inf. Crit.	47,326.790
Residual Deviance	15,374.760 (df = 12790)
Null Deviance	22,860.890 (df = 12794)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 10: Confidence intervals

	Exponentiated Coefficient	Exponentiated 2.5%	Exponentiated 97.5%
(Intercept)	1.501	1.448	1.555
STARS2	2.283	2.224	2.344
STARS3	2.898	2.816	2.983
STARS4	3.419	3.284	3.559
Alcohol	1.005	1.002	1.008

5.1.1.1 Poisson Regression Model 1 Metrics

5.1.1.1.1 Dispersion

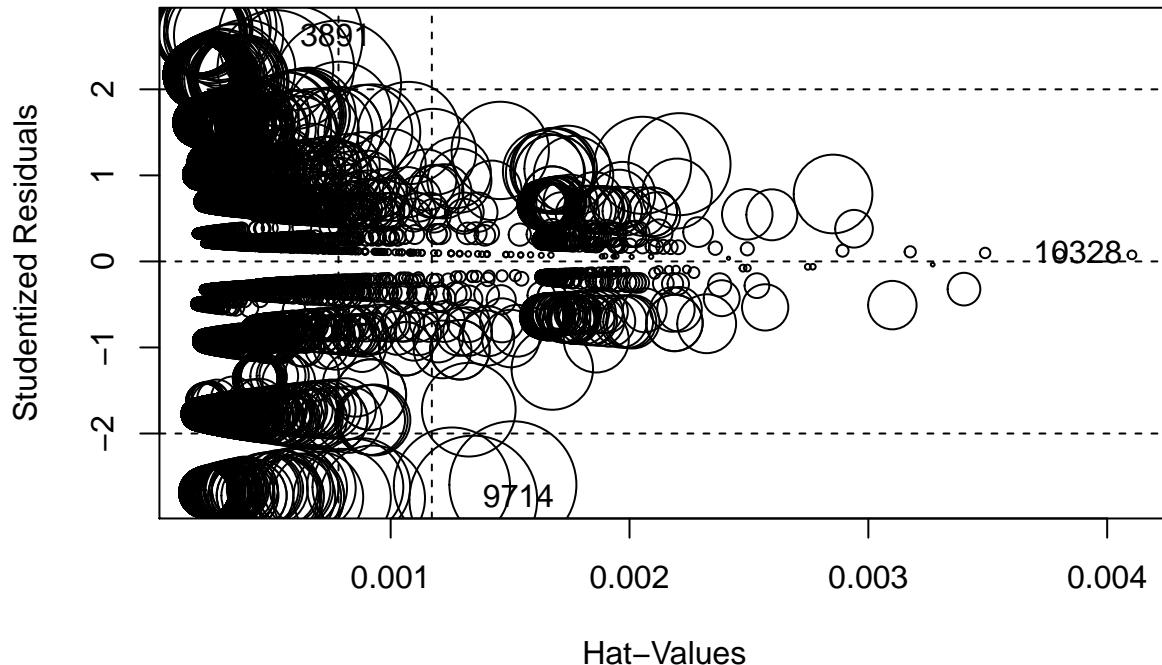
dispersion 0.9730167

Our dispersion results are very close to 1. So, we can say it is not over or under dispersed. However, we can further test for over dispersion by dividing the deviance of our model by the residuals. The result of this test is 1.2020925 and since this result is not greater than 1.5, we can claim that the data is not over-dispersed.⁶

⁶“Multiple Logistic Regression.” R Companion: Multiple Logistic Regression. N.p., n.d. Web. 04 Dec. 2016.

5.1.1.2 Influential Points

We further test for influential points in the data set. This test indicates that rows 10328, 9714, and 3891, have great influence on our model. It would be important to discuss these rows with the appropriate data steward to understand if these are accurate measurements and should be included in the analysis. Due to time limitations, we are not able to verify these rows and they have been included in this analysis.



```
##           StudRes      Hat      CookD
## 3891    2.59248567 0.0005804453 1.31210e-03
## 9714   -2.76735034 0.0013458546 1.03277e-03
## 10328   0.07597296 0.0041037245 4.80641e-06
```

5.1.1.3 Verifying Predictions

We also verify predicted values for the training data set, in order to verify the output of our model against the training data set.

TARGET	STARS	Alcohol	Fitted
3	2	9.9	3.596
3	3	10.07	4.569
5	3	22	4.844
3	1	6.2	1.547
4	2	13.7	3.663
0	1	15.4	1.618

The predictions are close in value, we can further see the prediction quality of the model by reviewing the frequency table for observed vs predicted values.

Target	Obs	Predicted
0	2734	0
1	244	51
2	1091	5254
3	2611	262
4	3177	4574
5	2014	2553
6	765	101
7	142	0
8	17	0

Goodness of Fit Test

Goodness of Fit Test using Pearson Chi square test gives us the result of 0 shows that our model is good.

5.1.2 Poisson Regression Model 2

As in our first Poisson model, we build our second Poisson Regression model and we need to verify the confidence levels are appropriate. After producing the Confidence level for Confidence level for CitricAcid and pH, we see that they run through 1 and and their P(z) values are clearly not significant. Based on both info we can remove CitricAcid and pH from the model.

Table 13: Poisson Regression Model 2

	<i>Dependent variable:</i>
	TARGET
Constant	0.461*** (0.044)
LabelAppeal-1	0.383*** (0.038)
LabelAppeal0	0.685*** (0.037)
LabelAppeal1	0.909*** (0.037)
LabelAppeal2	1.092*** (0.042)
CitricAcid	0.004 (0.006)
pH	-0.011 (0.008)
Observations	12,795
Log Likelihood	-26,380.660
Akaike Inf. Crit.	52,775.320
Residual Deviance	20,819.300 (df = 12788)
Null Deviance	22,860.890 (df = 12794)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 14: Confidence intervals

	2.5 %	97.5 %
(Intercept)	1.585	1.455
LabelAppeal-1	1.467	1.363
LabelAppeal0	1.983	1.846
LabelAppeal1	2.481	2.309
LabelAppeal2	2.98	2.747
CitricAcid	1.004	0.9926
pH	0.9894	0.9747

We removed CitricAcid and pH then created a new Model with only LabelAppeal. The impact of LabelAppeal is very significant since this variable is explaining a great deal of variation in our dependent variable. A neutral LabelAppeal of 0 will have wine sales 1.98 times greater than a very negative LabelAppeal of -2. Also, a great LabelAppeal of 2 will have 2.98 times greater wine sales than a than a very negative LabelAppeal of -2.

Table 15: Poisson Regression Model 2 with LabelAppeal

<i>Dependent variable:</i>	
	TARGET
Constant	0.428*** (0.036)
LabelAppeal-1	0.383*** (0.038)
LabelAppeal0	0.685*** (0.037)
LabelAppeal1	0.909*** (0.037)
LabelAppeal2	1.092*** (0.042)
Observations	12,795
Log Likelihood	-26,381.890
Akaike Inf. Crit.	52,773.780
Residual Deviance	20,821.760 (df = 12790)
Null Deviance	22,860.890 (df = 12794)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 16: Confidence intervals

	Exponentiated Coefficient	Exponentiated 2.5%	Exponentiated 97.5%
(Intercept)	1.534	1.428	1.644
LabelAppeal-1	1.467	1.363	1.582
LabelAppeal0	1.983	1.847	2.133
LabelAppeal1	2.482	2.31	2.672
LabelAppeal2	2.979	2.747	3.235

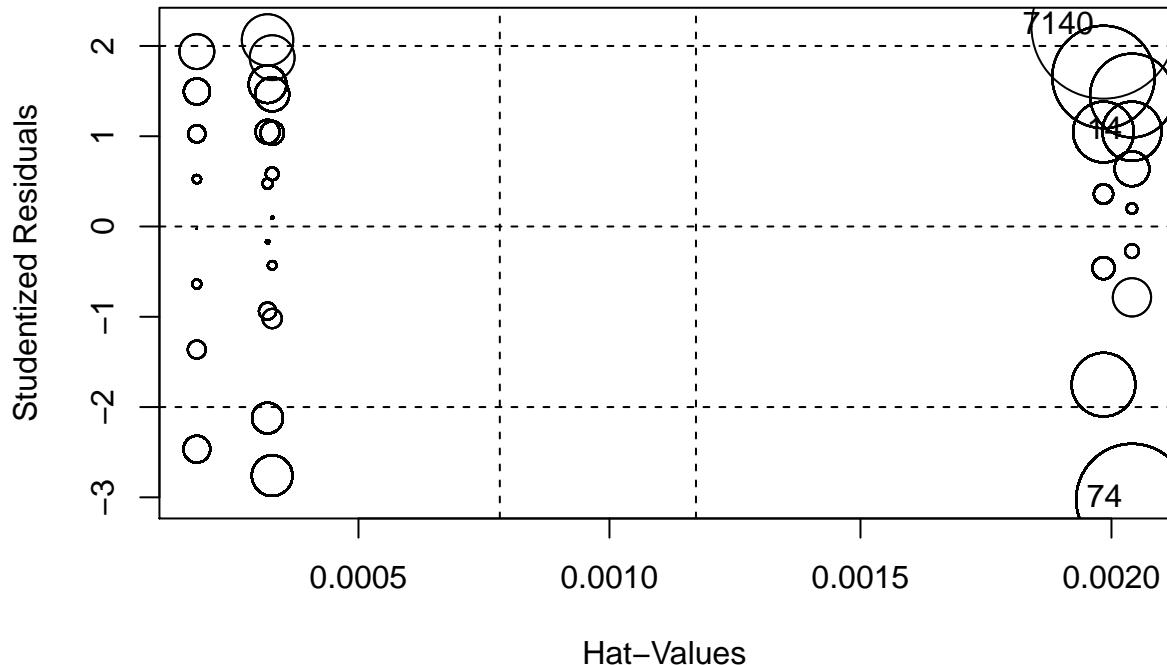
5.1.2.1 Poisson Regression Model 2 Metrics

dispersion 1.035287

Our dispersion results are very close to 1. So, we can say it is not over or under dispersed. However, we can further test for over dispersion by dividing the deviance of our model by the residuals. The result of this test is 1.6279715 and since this result is greater than 1.5, we can claim that the data is over-dispersed.

5.1.2.1.1 Influential points

We further test for influential points in the data set. This test indicates that rows 7140, 14, and 74, have great influence on our model. It would be important to discuss these rows with the appropriate data steward to understand if these are accurate measurements and should be included in the analysis. Due to time limitations, we are not able to verify these rows and they have been included in this analysis.



```
##          StudRes      Hat      CookD
## 14     1.054918 0.002040816 0.0005298851
## 74    -3.024586 0.002040816 0.0018726921
## 7140   2.213682 0.001984127 0.0031210472
```

5.1.2.1.2 Verifying Predictions

We also verify predicted values for the training data set, in order to verify the output of our model against the training data set.

TARGET	LabelAppeal	Alcohol	Fitted
3	0	9.9	3.042
3	-1	10.07	2.25
5	-1	22	2.25
3	-1	6.2	2.25
4	0	13.7	3.042
0	0	15.4	3.042

The predictions are close in value, we can further see the prediction quality of the model by reviewing the frequency table for observed vs predicted values.

Target	Obs	Predicted
0	2734	0
1	244	0
2	1091	3640
3	2611	5617
4	3177	3048
5	2014	490
6	765	0
7	142	0
8	17	0

Goodness of fit test

The goodness of fit test using Pearson Chi-square test results are 0 which shows that our model is good and statistically significant.

5.2 Negative Binomial Regression Models

5.2.1 Negative Binomial Regression Model 1

In the first negative binomial regression model, all of the coefficients are positive. The variable that had to be removed was wine rating, due to the fact that it led to an error in the model, stating that the iteration limit was reached. Even though this categorical variable guarantees high significance and also higher coefficients (0.4 for STARS = 2, 0.6 for STARS = 3, and 0.7 for STARS = 4), this variable would not be appropriate to use for negative binomial regression. The alcohol content is also an equally significant variable but does not have a coefficient as high as those of the wine rating. However, this variable and residual sugar can be used for negative binomial regression because the resulting over dispersion is not so high.

Table 19: Negative Binomial Regression Model 1

	<i>Dependent variable:</i>	
	TARGET	(2)
Constant	0.405*** (0.018)	0.987*** (0.019)
STARS2	0.825*** (0.013)	
STARS3	1.064*** (0.015)	
STARS4	1.229*** (0.021)	
Alcohol	0.005*** (0.001)	0.011*** (0.002)
ResidualSugar	0.0002 (0.0002)	0.001** (0.0003)
Observations	12,795	12,796
Log Likelihood	-23,659.120	-27,142.350
θ	39,834.370 (37,787.650) ($p = 0.292$)	7.521*** (0.435) ($p = 0.000$)
Akaike Inf. Crit.	47,330.240	54,290.700
Residual Deviance	15,373.240 (df = 12789)	18,163.620 (df = 12793)
Null Deviance	22,859.700 (df = 12794)	18,214.010 (df = 12795)

Note:

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

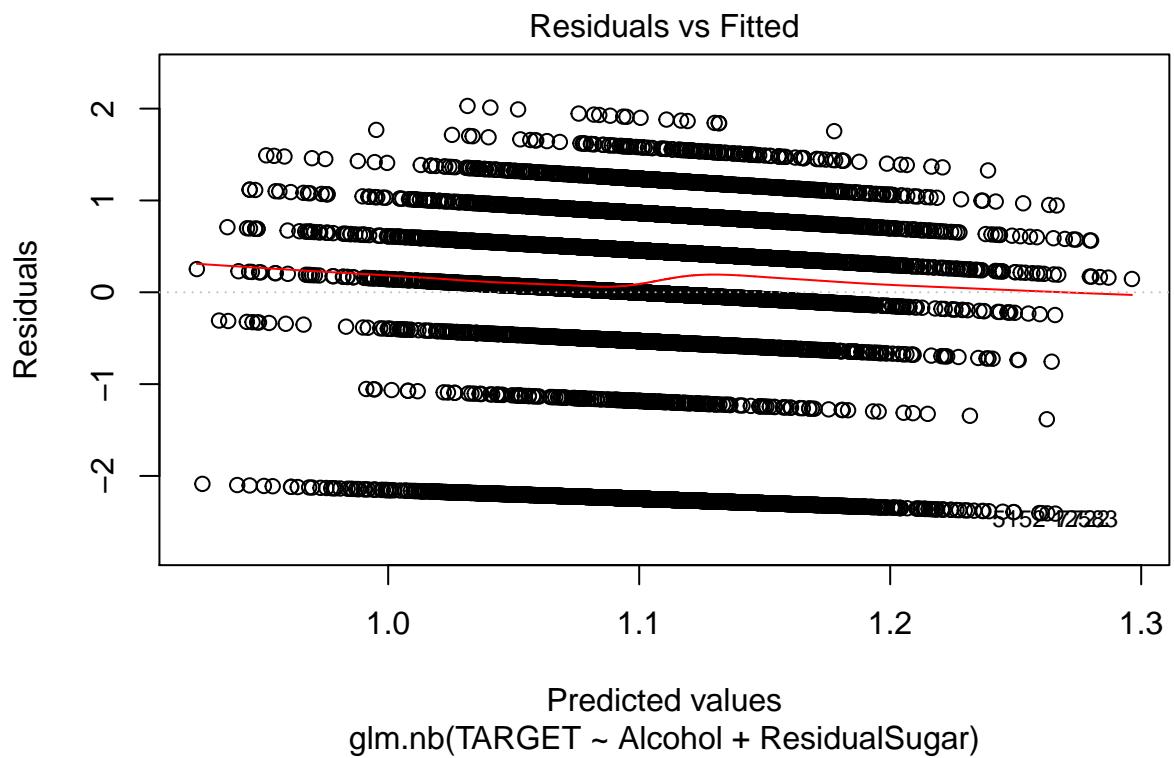
5.2.1.1 Negative Binomial Regression Model 1 Evaluation

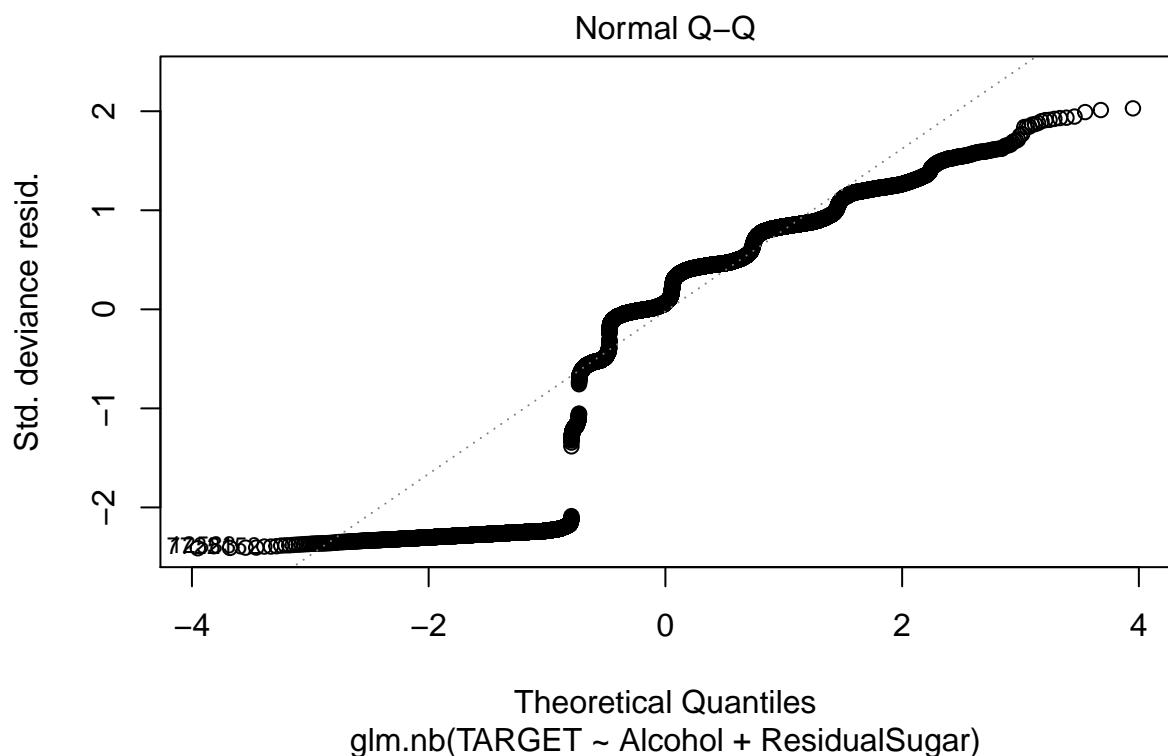
In the model-fitting criterion, the chi-squared p-value is close to 0. This implies that the model is valid.

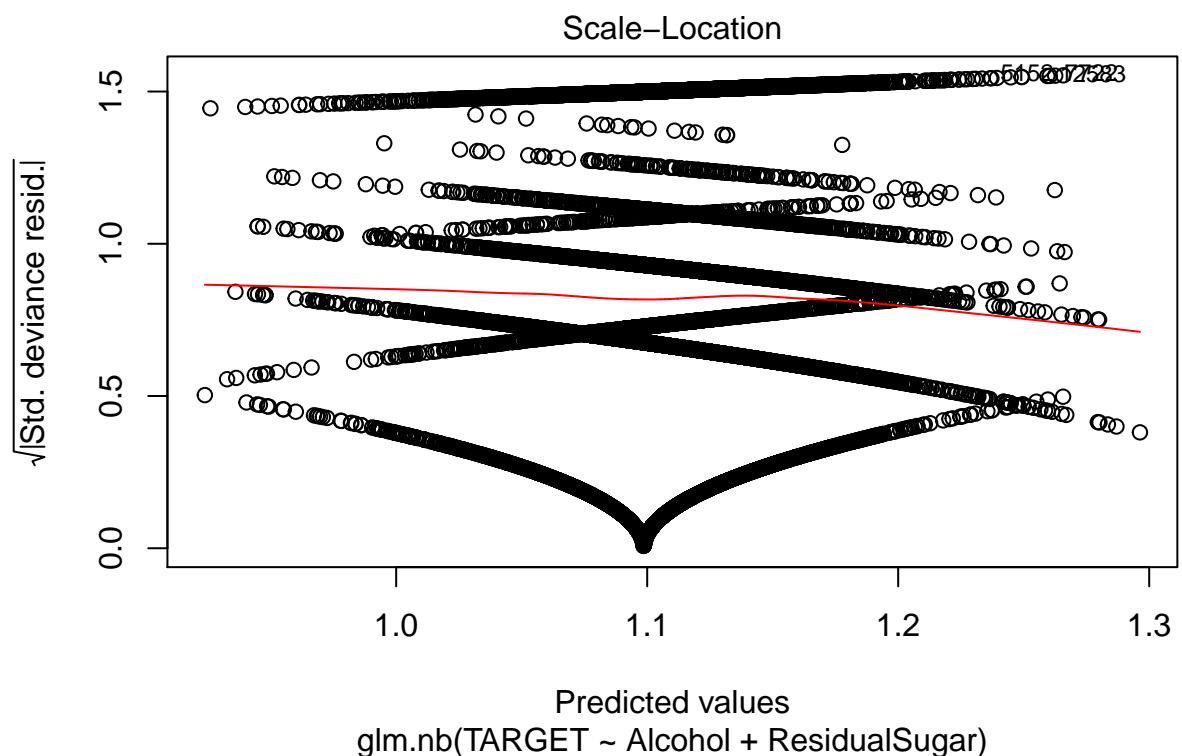
residual.deviance	residual.degrees.of.freedom	chisq.p.value
18164	12793	3.968e-195

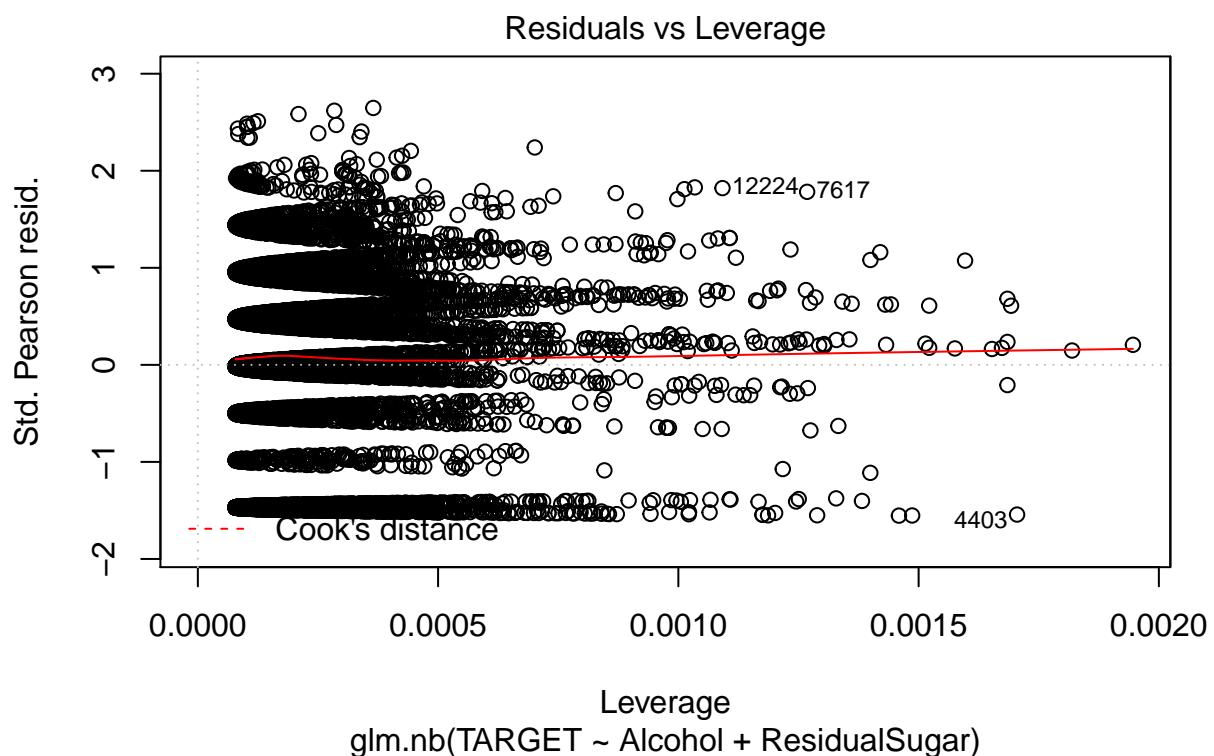
5.2.1.1.1 Diagnostic Plots for Negative Binomial Regression Model 1

The normal q-q plot shows a non-linear relationship.









5.2.2 Negative Binomial Regression Model 2

In the second negative binomial regression model, all of the coefficients are positive except for that of pH. The only significant variable is the label appeal. Except for the score of 3, all of the other scores for label appeal, yield significant results. Most of the coefficients for label appeal are close to 1 or slightly greater than 1 (0.7 for Label Appeal = 0, 0.9 for Label Appeal = 1, 1.09 for Label Appeal = 2, and 0.7 for Label Appeal = 3). The only score that yields a coefficient that is less than 1 is -1. The coefficient for this is 0.4. The standard error is 3.5. The theta value is 23.46, guaranteeing a lower level of over dispersion.

Table 21: Negative Binomial Regression Model 2

	Dependent variable:	
	TARGET	
	(1)	(2)
Constant	0.462*** (0.045)	0.428*** (0.037)
CitricAcid	0.004 (0.006)	
pH	-0.011 (0.008)	
LabelAppeal1	0.383*** (0.039)	0.383*** (0.039)
LabelAppeal0	0.685*** (0.038)	0.685*** (0.038)
LabelAppeal1	0.909*** (0.038)	0.909*** (0.038)
LabelAppeal2	1.092*** (0.044)	1.092*** (0.044)
LabelAppeal3	0.703 (0.615)	0.671 (0.614)
Observations	12,796	12,796
Log Likelihood	-26,356.870	-26,358.000
θ	23.465*** (3.501) ($p = 0.000$)	23.422*** (3.489) ($p = 0.000$)
Akaike Inf. Crit.	52,729.730	52,728.000
Residual Deviance	19,237.720 (df = 12788)	19,237.400 (df = 12790)
Null Deviance (df = 12795)	21,051.280	21,048.310

Note:

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

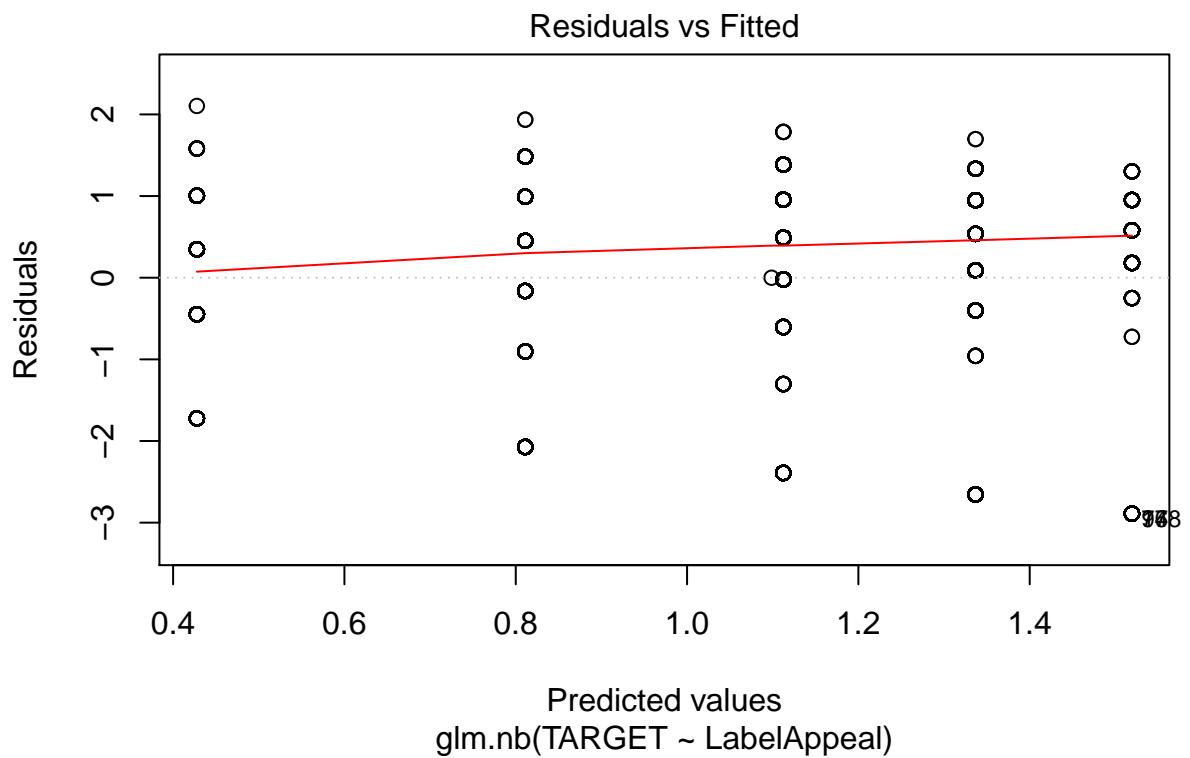
5.2.2.1 Negative Binomial Regression Model 2 Evaluation

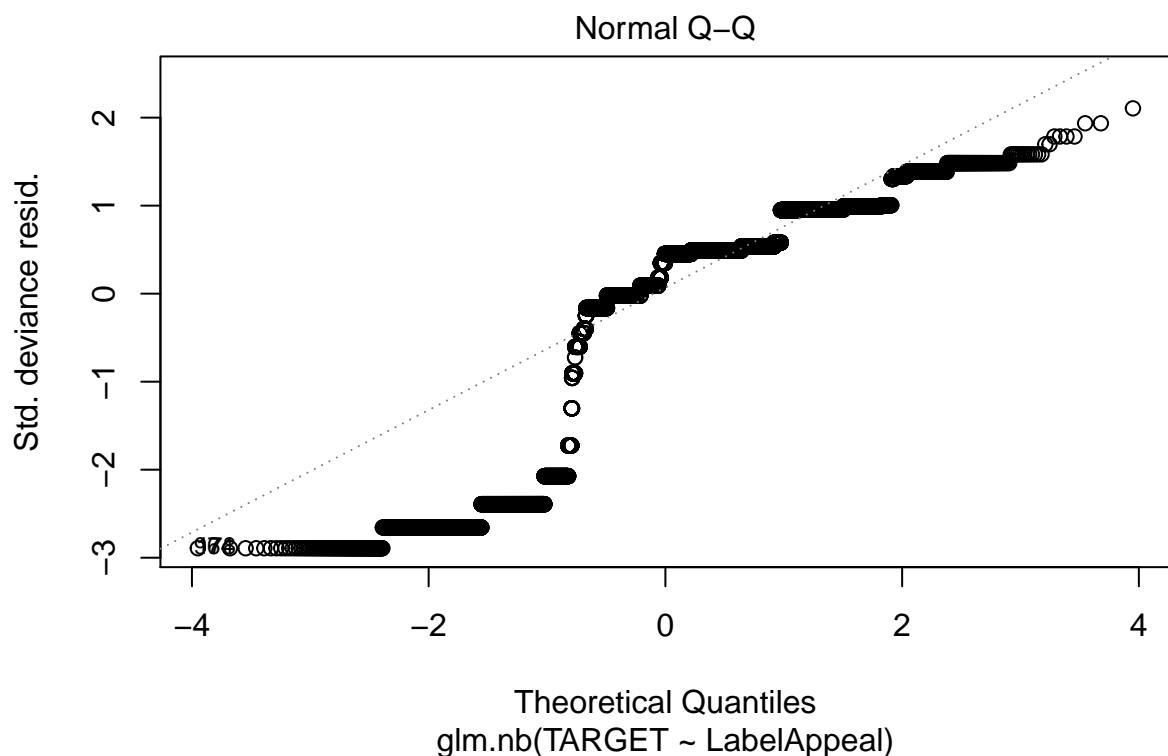
Like the previous model, the chi-squared p-value for this model is close to 0. This model is also valid.

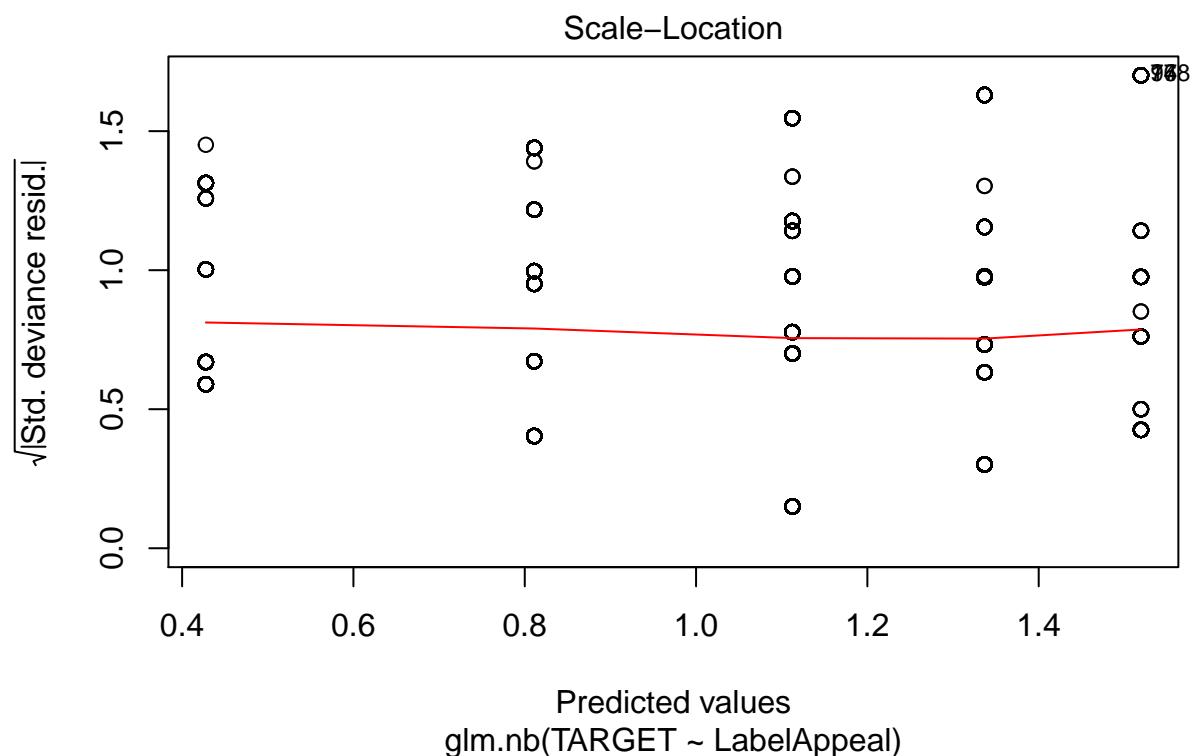
residual.deviance	residual.degrees.of.freedom	chisq.p.value
19237	12790	4.356e-269

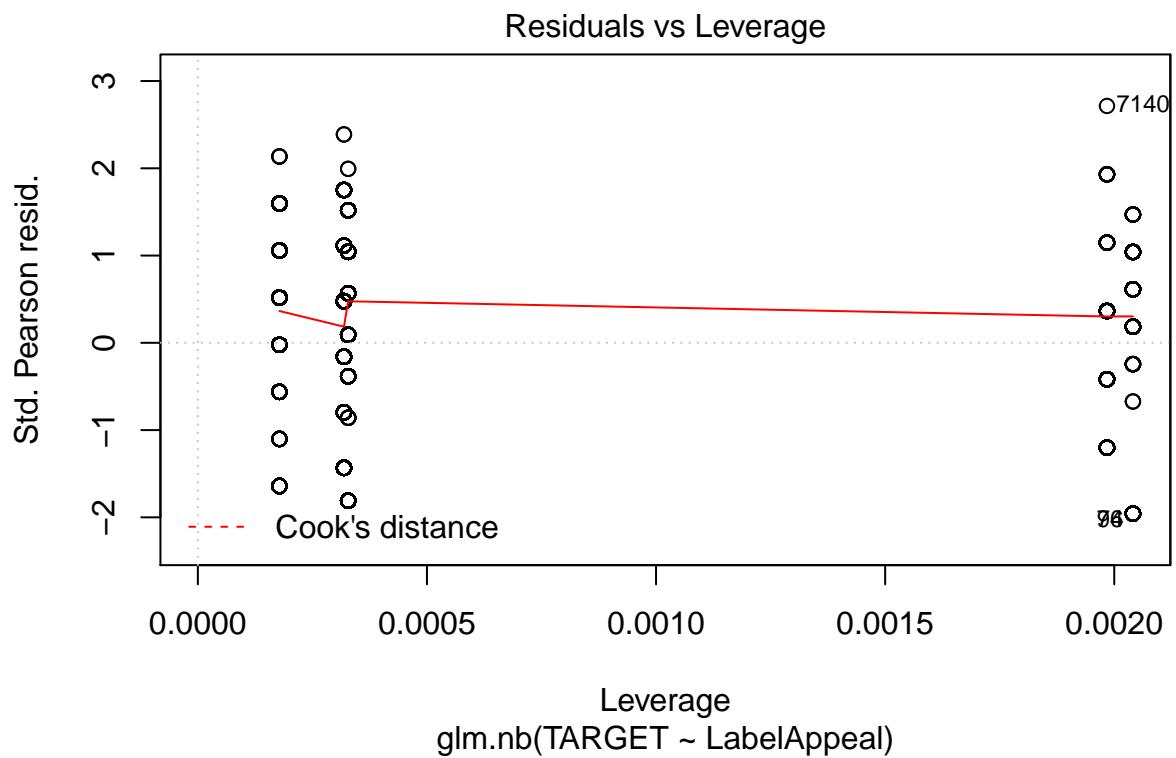
5.2.2.1.1 Diagnostic Plots for Negative Binomial Regression Model 2

Like the previous model, the normal q-q plot shows a non-linear relationship.









5.3 Multiple Linear Regression

5.3.1 Linear Regression with All Variables

The first linear regression we generate includes all variables from our data set. The intercept is at 3.139 cases and Density shows a large negative impact on cases sold but with its narrow range its difficult to tell how meaningful this variable is in cases sold. The STARS variable shows an expected impact on cases sold, the difference between 1 Star and 4 Stars is an added 3.36 cases in sales.

Table 23: Linear Model with all variables

	<i>Dependent variable:</i>
	TARGET
Constant	3.139*** (0.606)
FixedAcidity	−0.008*** (0.003)
VolatileAcidity	−0.125*** (0.020)
CitricAcid	0.013 (0.019)
I(ResidualSugar^1.25)	−0.001** (0.0002)
Chlorides	−0.234*** (0.052)
I(FreeSulfurDioxide^1.25)	0.0001*** (0.00003)
TotalSulfurDioxide	0.0002** (0.0001)
Density	−1.480** (0.602)
pH	−0.003 (0.024)
Sulphates	−0.046** (0.018)
Alcohol	0.016*** (0.004)
LabelAppeal	0.427*** (0.019)
STARS2	1.905*** (0.037)
STARS3	2.697*** (0.046)
STARS4	3.355*** (0.080)
Observations	7,256
R ²	0.501
Adjusted R ²	0.500
Residual Std. Error	1.356 (df = 7240)
F Statistic	485.267*** (df = 15; 7240) (p = 0.000)

Note: *p<0.1; **p<0.05; ***p<0.01

5.3.1.1 Linear Model Metrics with all Variables

5.3.1.1.1 Multicollinearity

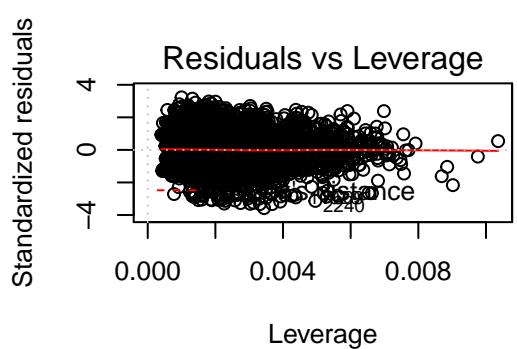
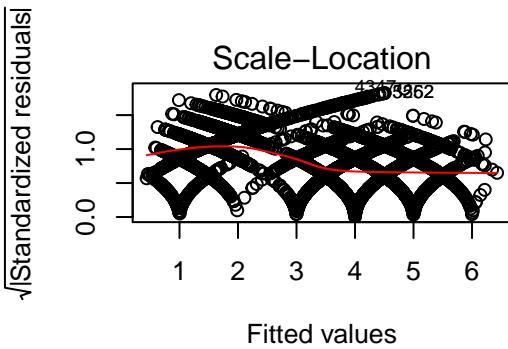
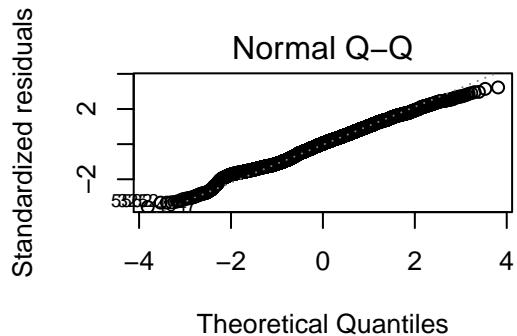
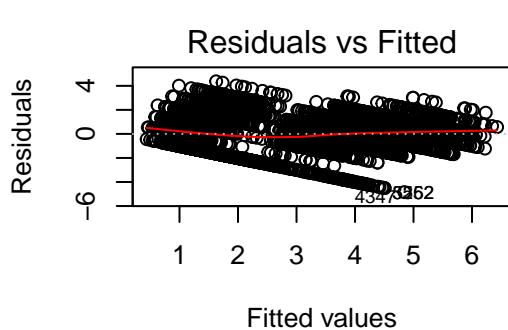
We square $GVIF^{(1/(2*Df))}$ ⁷ in order to use the VIF threshold of 5 for multicollinearity. Fortunately, we find that no variable exceeds our pre-established threshold of 5 for multicollinearity.

rn	GVIF	Df	$GVIF^{(1/(2*Df))}$	Adjusted_GVIF
FixedAcidity	1.003005	1	1.001501	1.003005
VolatileAcidity	1.004193	1	1.002095	1.004193
CitricAcid	1.003311	1	1.001654	1.003311
I(ResidualSugar^1.25)	1.001823	1	1.000911	1.001823
Chlorides	1.002043	1	1.001021	1.002043
I(FreeSulfurDioxide^1.25)	1.003812	1	1.001904	1.003812
TotalSulfurDioxide	1.005073	1	1.002533	1.005073
Density	1.002075	1	1.001037	1.002075
pH	1.002538	1	1.001268	1.002538
Sulphates	1.003861	1	1.001929	1.003861
Alcohol	1.006806	1	1.003397	1.006806
LabelAppeal	1.106042	1	1.051685	1.106042
STARS	1.121941	3	1.019362	1.039098

⁷"Which Variance Inflation Factor Should I Be Using: $GVIF$ or $GVIF^{1/(2*Df)}$?" R. N.p., n.d. Web. 13 Nov. 2016.

5.3.1.1.2 Diagnostic Plots

The Normal Q-Q plots show a linear relationship which suggests that the data is normally distributed.



5.3.2 Linear Regression Selection using AIC

5.3.2.1 Variable Selection

Using the R package MASS we can utilize the `stepAIC` function with the parameter of `direction` set to `both` to select our best subset of variables for a new model.

The method effectively removed pH and CitricAcid which were both shown to be not significant in the previous linear model using all variables.

```
## Stepwise Model Path
## Analysis of Deviance Table
##
## Initial Model:
## TARGET ~ FixedAcidity + VolatileAcidity + CitricAcid + I(ResidualSugar^1.25) +
##          Chlorides + I(FreeSulfurDioxide^1.25) + TotalSulfurDioxide +
##          Density + pH + Sulphates + Alcohol + LabelAppeal + STARS
##
## Final Model:
## TARGET ~ FixedAcidity + VolatileAcidity + I(ResidualSugar^1.25) +
##          Chlorides + I(FreeSulfurDioxide^1.25) + TotalSulfurDioxide +
##          Density + Sulphates + Alcohol + LabelAppeal + STARS
##
##          Step Df   Deviance Resid. Df Resid. Dev      AIC
## 1                   7240    13311.93 4435.174
## 2 - pH     1  0.03552113    7241    13311.97 4433.193
## 3 - CitricAcid  1  0.94340380    7242    13312.91 4431.707
```

5.3.2.2 Model using Variable Selection

We see slight variation in our intercept and some variable coefficients which is expected with the reduced number of variables. However, we don't see any large changes, one benefit with the reduced variables is our model interpretability is improved and our F Statistic has increased with the reduced degrees of freedom.

Additionally, we see that the adjusted R^2 has not changed which is expected since we removed variables that were not considered significant.

Table 25: Linear Model with select variables

	<i>Dependent variable:</i>
	TARGET
Constant	3.134*** (0.601)
FixedAcidity	−0.008*** (0.003)
VolatileAcidity	−0.126*** (0.020)
I(ResidualSugar^1.25)	−0.001** (0.0002)
Chlorides	−0.235*** (0.052)
I(FreeSulfurDioxide^1.25)	0.0001*** (0.00003)
TotalSulfurDioxide	0.0002** (0.0001)
Density	−1.482** (0.602)
Sulphates	−0.046** (0.018)
Alcohol	0.016*** (0.004)
LabelAppeal	0.427*** (0.019)
STARS2	1.906*** (0.037)
STARS3	2.697*** (0.046)
STARS4	3.355*** (0.080)
Observations	7,256
R ²	0.501
Adjusted R ²	0.500
Residual Std. Error	1.356 (df = 7242)
F Statistic	559.996*** (df = 13; 7242) (p = 0.000)

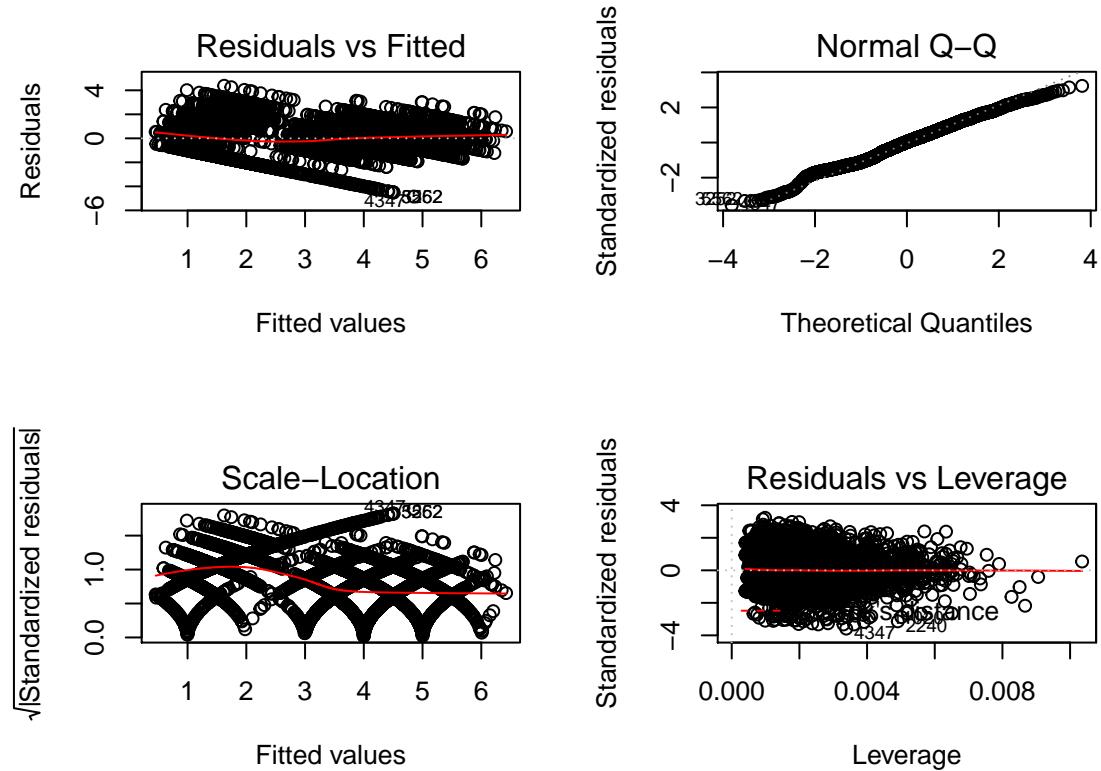
Note:

*p<0.1; **p<0.05; ***p<0.01

5.3.2.3 Linear Model Metrics with select Variables

5.3.2.3.1 Diagnostic Plots

The Normal Q-Q plots show a linear relationship which suggests that the data is normally distributed.



5.3.2.3.2 Multicollinearity

We square $GVIF^{(1/(2*Df))}$ in order to use the VIF threshold of 5 for multicollinearity. Fortunately, we find that no variable exceeds our pre-established threshold of 5 for multicollinearity.

rn	GVIF	Df	$GVIF^{(1/(2*Df))}$	Adjusted_GVIF
FixedAcidity	1.002826	1	1.001412	1.002826
VolatileAcidity	1.004095	1	1.002045	1.004095
I(ResidualSugar^1.25)	1.001601	1	1.000800	1.001601
Chlorides	1.001750	1	1.000875	1.001750
I(FreeSulfurDioxide^1.25)	1.003762	1	1.001879	1.003762
TotalSulfurDioxide	1.004725	1	1.002360	1.004725
Density	1.002057	1	1.001028	1.002057
Sulphates	1.003403	1	1.001700	1.003403
Alcohol	1.006586	1	1.003288	1.006586
LabelAppeal	1.105763	1	1.051553	1.105763
STARS	1.118645	3	1.018862	1.038080

6 Selected Model

In order to select our most appropriate model we will use the AIC as our selection criteria. This method was outlined by Snipes & Taylor for their similar research in selecting models from wine ratings and prices.⁸ As per Snipes & Taylor - "The best model is then the model with the lowest AICc (or AIC) score". Therefore, based on the results of our AIC table below, Linear Regression 2 is our best model. However, for deployment we will need to use one of the count regressions. Therefore, the count regression with the lowest AIC is Poisson Regression 1 which we will use for our predictions.

model	AIC
Poisson Regression 1	47326.78
Poisson Regression 2	52773.78
Negative binomial Regression 1	54290.7
Negative binomial Regression 2	52728
Linear Regression 1	25028.81
Linear Regression 2	25025.34

Model for Deployment - Poisson Model 1:

$$TARGET = 1.50 * 2.28 * (STARS = "2") * 2.9 * (STARS = "3") * 3.42 * (STARS = "4") * 1.004 * Alcohol$$

⁸Snipes, & Taylor. (2014). Model selection and Akaike Information Criteria: An example from wine ratings and prices. *Wine Economics and Policy*, 3(1), 3-9.

6.1 Predictions

Due to several missing values in the evaluation data set we will use the missForest package again to impute the missing values before predictions.

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	3	5.4	-0.86	0.27	-10.7	0.092	23	398	0.9853	5.02	0.64	12.3	-1	6	2
4	9	12.4	0.385	-0.76	-19.7	1.169	-37	68	0.9905	3.37	1.09	16	0	6	2
2	10	7.2	1.75	0.17	-33	0.065	9	76	1.046	4.61	0.68	8.55	0	8	1
2	18	6.2	0.1	1.8	1	-0.179	104	89	0.9888	3.2	2.11	12.3	-1	8	1
4	21	11.4	0.21	0.28	1.2	0.038	70	53	1.029	2.54	-0.07	4.8	0	10	2
5	30	17.6	0.04	-1.15	1.4	0.535	-250	140	0.9503	3.06	-0.02	11.4	1	8	4
5	31	15.5	0.53	-0.53	4.6	1.263	10	17	1	3.07	0.75	8.5	0	12	3
5	37	15.9	1.19	1.14	31.9	-0.299	115	381	1.034	2.99	0.31	11.4	1	7	3
1	39	11.6	0.32	0.55	-50.9	0.076	35	83	1	3.32	2.18	-0.5	0	12	1
4	47	3.8	0.22	0.31	-7.7	0.039	40	129	0.9061	4.72	-0.64	10.9	0	7	2
2	60	6.8	1.68	0.44	-13.3	0.046	65.67	583	1.008	3.198	1.64	12.6	0	8	1
5	62	9	-0.21	0.04	51.4	0.237	213	-527	0.9952	3.16	0.7	14.7	1	10	3
4	63	24.6	0.03	-1.2	1.3	0.035	241	297	0.9923	2.22	0.5	9.8	0	9	2
3	64	13	0.21	0.32	-3.2	-0.263	111	141	0.9592	3.2	0.5719	4.2	0	8	2
2	68	17.9	-0.42	-0.91	7.1	0.045	-177	169	0.9531	3.17	-1.12	13.2	-1	9	1
4	75	10	0.2	1.27	30.9	0.05	19	152	0.994	3.153	0.42	13.8	-1	11	2
2	76	7.4	0.29	0.5	8.5	-0.48	178	647	0.9728	3.45	0.5	10.2	-1	8	1
4	83	11.7	1.18	-0.94	-62	0.675	7	-393	0.9997	3.96	0.69	5.2	1	13	2
4	87	9.7	0.41	-1	1.101	-0.235	24	113	0.9977	3.44	0.53	9.8	0	7	2
5	92	5.2	-0.98	-0.08	6.4	0.046	180	166	0.994	3.3	2.18	9.9	1	5	3
4	98	7.3	0.19	0.49	-35.55	0.38	-75	343	0.9998	3.42	0.36	13.3	-2	8	2
2	106	6.7	-0.78	0.31	16.4	-0.03	20	-16	0.9983	3.11	-0.57	9.1	0	7	1
5	107	4.1	0.54	-0.3	2.2	0.088	9	427	0.9972	3.98	2.06	11.4	2	8	3
2	113	6.5	1.53	0.84	-14.4	0.047	54	184	0.9461	3.17	-0.56	9.2	-1	7	1
4	120	11.8	0.27	0.46	11.75	0.316	61	794	1.02	2.2	0.07	5.4	0	7	2
4	123	-5	0.16	0.78	1.4	-0.898	10	67	0.9461	2.5	0.41	9.4	2	7	2
4	125	8.3	0.26	1.93	-12.7	0.042	41	479	0.9987	3.1	1.66	12	-1	9	2
5	126	3.3	0.23	-1.39	1.8	0.043	-183	69	0.9933	3.38	0.31	10.8	1	6	4
5	128	8.7	0.3	0.3	-4.5	0.053	48.5	314	0.9474	2.73	2	10.3	0	8	4
2	129	1.2	1.01	0.32	14.75	0.038	-345	277	0.9907	4.29	-1.02	9	-1	7	1
5	131	7	0.21	0.49	-1.481	-0.066	400	-239	0.9591	3.293	0.6206	10.8	0	8	3
3	135	7.9	0.16	1.32	7.4	0.05	109	152	0.9961	3.12	1.28	3.8	1	8	2
5	141	-5.4	0.345	0.27	10.1	0.056	38	187	0.9949	2.14	0.12	14.4	0	7	3
2	147	-3.9	0.74	-0.95	11.7	0.4	293	185	0.9927	3.28	-2.01	16.4	0	7	1
2	148	8	-0.41	0.57	10.4	0.585	176	134	0.9841	3.12	-0.35	10.7	-1	9	1
4	151	6.7	0.14	0.49	1.4	-0.233	6	-77	1.017	2.92	0.42	10.8	0	7	2
2	156	6.4	0.29	0.18	3	0.04	21	-102	0.9974	4.39	1.42	9.2	1	7	1
5	157	6.9	-2.34	1.33	-28.4	0.039	-30	98	1.013	4.64	0.46	9.2	-1	7	3
4	174	5.6	0.12	0.24	4.8	-0.465	24	72	1.024	3.23	3.32	12.6	-1	6	2
2	186	7.9	-0.42	-1.2	1.6	0.582	201	-205	0.9568	4.2	0.69	11.2	1	9	1
2	193	6.8	1.19	0.98	1.2	0.034	6	68	1.027	3.14	0.37	16.8	-1	7	1
4	195	1.2	0.3	0.21	-27.85	-	33	153	0.9924	3.96	1.06	11.14	0	8	2
						0.01562									
2	212	8.4	0.725	0.11	1.9	-0.296	35	63	0.9965	3.19	2.05	9.6	0	9	1
2	213	8	1.2	-0.26	12.6	-0.351	-98	213	0.9784	3.66	0.56	9.3	0	9	1
2	217	6.8	1.36	0.3	20.7	0.043	-263	63.26	1.033	3.17	0.46	24.4	0	7	1
4	223	14.3	0.32	0.25	-2.3	0.013	13	349	0.9957	4.65	-1.19	12.2	0	6	2
2	226	6.6	0.82	0.24	23.8	0.048	55	347	0.9751	3.2	0.38	15.2	0	7	1
4	228	-4	0.16	0.27	44.4	0.607	227	98	1.031	2.24	0.34	7.9	1	6	2
5	230	28.3	0.645	0.03	-7.9	0.086	195	39	0.9969	2.93	-0.53	11.6	0	8	3
2	241	4.7	0.98	0.35	24.7	0.235	11	-9	0.9926	2.19	0.38	12.4	0	9	1
4	243	5.8	0.21	0.25	-50.5	0.038	-33	-135	0.9647	3.28	0.49	9.4	0	7	2
2	249	8.9	0.33	-0.5	61.55	0.038	-234	138	0.9637	3.03	0.09	10.66	0	8	1
5	281	10.6	-1.02	-0.61	1.1	-0.422	-25	107	0.9923	2.45	-0.34	10.2	0	9	3
2	288	10.9	1.2	1.22	27.9	0.12	207	17	1	4.2	-1.31	11.7	0	12	1
2	294	8.8	0.2	-0.59	92.4	0.053	167	214	1.026	3.263	0.79	8.8	-2	9	1
2	295	6.3	1.15	0.24	91.4	0.052	36	135	0.9937	2.52	-1.13	11.08	-2	7	1
4	300	6.5	0.62	1.82	8	-0.179	46.48	431	0.9732	2.68	0.47	7.4	2	7	2
4	302	9.3	0.31	0.31	59.8	0.379	15	89	0.9976	2.48	0.57	6.3	1	8	2
4	303	0.3	-0.87	-0.8	69.5	0.54	170	83	0.9887	3.09	-0.44	11.7	0	7	2
2	308	6	0.25	0.28	-37.7	-0.468	37	132	0.9949	4.01	-1.96	9.4	-1	7	1
4	319	9	0.35	1.5	51.9	0.252	282	131.7	0.9912	3.35	-0.31	11.63	1	6	2
4	320	8.7	0.31	0.27	5.6	-0.331	91	148.2	0.9693	3.65	0.52	13.3	0	9	2
2	324	-0.1	0.32	0.37	1.8	-0.286	13	-184	0.9945	4.55	0.3083	10.5	0	7	1
2	331	6.6	0.24	0.35	-13.7	0.031	36	135	0.9938	3.24	-1.81	14.5	-1	7	1
2	343	7.2	0.21	1.15	25.4	0.043	186	213	0.9837	3.21	0.5	9.6	0	8	1
2	347	7.4	-1.14	0.62	6	0.022	40	125	0.9928	3.13	2.31	5.2	-1	8	1
4	348	10.6	0.34	0.35	10.01	-0.657	-229	179	0.998	2.87	-2.56	8.3	0	7	2
4	350	4.6	0.24	-0.66	1.3	0.043	71	462	0.9543	3.19	-1.32	14.7	1	8	2
2	357	3.9	0.53	1.21	2	0.058	243	-144	1.016	3.21	-0.86	12.4	-2	8	1
4	358	16	0.43	0.34	2.439	0.068	-166	104	1.025	3.19	2.03	9.3	0	7	2
5	360	15.8	0.86	0.38	41	0.625	70.12	132	0.9889	3.28	-0.07	12.4	0	6	3
2	366	-14.7	-0.42	0.31	22.3	0.035	-201	99	0.9891	3.26	-1.28	12.44	1	7	1
2	367	13.6	0.56	0.93	10	0.037	38	379	0.9964	3.54	0.35	15.7	-1	7	1
4	368	6.7	0.41	0.15	41.1	0.033	25	-30	0.9497	3.05	-0.4	0.1	1	7	3
2	376	0.5	0.98	0.53	2.1	-0.487	152	-149	1.019	2.19	-0.8	6.3	-1	9	1
2	380	5.8	-0.49	1.78	62.3	0.044	-208	152	0.9961	3.31	-2.01	9.4	0	6	1
2	388	2.8	0.46	0.44	-66	0.052	4	8	1.053	3.33	1.67	6.9	-2	11	1
4	396	12.5	0.43	1.78	3.6	0.00168	7	45	0.968	3.57	0.79	6.4	1	7	2
5	398	7.4	0.18	0.29	52.2	-0.171	260	366	0.9644	3.54	0.6	10.5	0	8	4
4	403	7.1	-0.49	-1	46.7	0.033	16	78	0.993	2.91	0.2766	5.4	0	8	3
2	410	3	-1.52	0.46	29.2	0.05	5	13	0.9974	4.32	0.79	10.2	0	11	1
4	412	8.1	0.24</												

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	497	15.9	1.05	0.35	10.7	0.551	26	239	0.9984	3.6	0.4626	9.1	-1	9	3
4	503	6.8	0.25	2.5	2.6	0.547	92	123	0.9951	3.03	-2.71	8.6	0	7	2
4	504	-3.2	1.92	0.42	5.5	-0.334	29	-636	0.9973	3.42	1.31	10.5	0	8	2
3	505	6.8	0.18	0.3	138.2	-0.195	88	443	0.9981	3.6	0.8	3.6	-2	7	2
2	507	17.5	0.34	-1.05	3.7	0.174	6	12	0.997	3.19	0.7	12.1	1	11	1
2	513	7.2	1.74	-0.92	-41.4	0.787	46	121	1.002	3.44	0.61	10.49	0	7	1
2	519	9.5	0.88	1.43	6.4	0.057	25	-86	0.9753	3.364	0.45	10.5	-1	7	1
4	521	12.7	-0.25	0.32	50.1	-0.515	-211	102	0.9796	3.41	0.79	6.1	0	7	2
4	522	6.2	-1.09	1.68	1	0.031	198	73	0.9903	3.42	0.98	8.7	0	7	2
2	545	9.1	0.55	0.45	23.9	0.049	-161	93.38	0.9974	2.11	0.5	6.1	0	7	1
4	549	-4.4	-0.05	1.46	-9.7	0.047	46	144	0.9888	2.31	-1.28	17.9	0	7	2
2	551	2.3	-0.03	-1.13	2.1	0.227	8	-266	1.034	4.09	0.74	9.6	0	8	1
5	556	0.5	0.23	0.31	-46.7	-0.286	312	96	0.9861	2.56	0.3694	15.6	2	7	3
6	557	8.4	-0.44	0.56	2.2	0.026	108	104	0.9678	3.38	-1.43	17.1	1	7	4
2	559	6.8	0.56	0.41	-61.8	0.22	79.5	183	0.9974	2.41	0.78	4.7	-1	7	1
2	560	10.9	1.13	0.96	1.1	0.556	286	84	0.9927	2.58	0.3346	14.4	-1	7	1
4	566	6.7	1.62	1.33	7.839	0.639	127	150	0.9968	3.22	0.51	9.9	0	7	2
4	569	7.1	0.32	0.29	43.2	-0.1	20	31	0.9946	3.27	0.64	7.8	1	8	2
2	573	6.6	-1.14	0.86	-7.9	0.169	-55	-193	0.9973	3.25	0.3997	16.2	-1	7	1
4	578	8.3	-0.48	0.1	67.1	0.081	45	202	0.9983	2.61	0.53	10	0	9	2
5	579	-1.7	0.01	0.25	-49.4	-0.319	58	54	0.9642	3.27	0.4688	15.5	1	8	3
5	582	-1.7	2.38	0.24	-44.6	0.122	18	147	0.9931	3.42	0.62	10.4	1	8	3
5	596	7.4	-1.2	-1.02	2.7	-0.355	30	107	0.9813	3.31	0.3591	9.9	0	8	3
2	598	9.2	0.19	0.46	2	0.047	16	49	0.9952	3.09	0.4882	10	-1	10	1
2	599	8	-1.14	-0.73	65.5	-0.034	41	103	0.99	3	-0.77	16.4	-1	9	1
2	602	0.2	0.26	0.26	-40.2	0.036	578	214	0.9986	4.65	0.5	10	0	8	1
4	605	15.5	0.2	1.37	-42	0.015	-82	-307	0.9849	4.2	0.55	12.05	-1	6	2
2	617	4.8	0.75	0.28	-24.8	0.134	-239	322	0.9692	3.38	0.409	11.3	-1	5	1
6	619	8.2	0.22	0.3	1.8	0.432	-173	185	0.9933	3.08	0.5	14.4	1	9	4
2	630	7.3	-1.09	0.26	61	0.09	7	135	0.9944	3.01	-0.89	5.6	1	8	1
4	634	-0.4	0.21	0.41	-38.6	-0.43	14	543	0.9657	2.96	0.53	13.4	0	10	2
2	643	7	0.87	0.4	1.1	0.058	30	93	1.023	2.23	0.3263	12	-1	8	1
2	645	9.4	2.085	0.2	2.4	0.355	-144	143	0.9729	3.28	0.58	6.8	-1	10	1
4	647	3.4	0.42	-0.03	2.4	0.061	19	74	0.9918	4.46	-0.27	10.9	1	7	2
2	649	6.7	0.42	0.46	9.7	0.054	67	-228	1.006	2.22	0.5	9	1	8	1
4	656	7.2	0.31	0.26	11.8	0.05	37	157	0.9962	2.7	0.01	11	0	8	2
5	657	-7.1	0.23	0.56	73.15	0.063	204.5	693	1.004	4.35	2.11	9.3	1	10	3
2	658	6.1	-0.23	0.25	6.9	0.02632	-25	21	0.9955	3.19	0.4	10.09	0	7	1
5	667	7.4	-0.43	1.2	43.6	0.037	290	-7	0.9687	3.25	0.37	10.4	-1	8	3
2	692	6.8	0.3	0.95	84.2	-0.409	45	150	0.9488	3.04	0.4209	11.8	0	7	1
5	693	6.6	0.88	-0.9	3.787	0.138	41	168	0.9567	3.2	1.08	8.7	0	7	3
4	698	16.4	1.32	-0.28	41	0.315	-218	-97	0.9986	2.89	0.5	8.2	1	12	2
4	699	7.3	1.44	2.04	12.8	-0.173	73	253	0.9488	4.19	0.71	13.6	0	8	2
5	700	7.1	1.85	0.98	33.3	0.045	88	587	0.9659	3.16	0.7019	1.4	2	8	4
4	704	6.5	0.33	0.3	3.8	0.036	190	88	0.9442	3.25	2.01	12.5	-1	7	2
2	707	7.2	0.92	-0.09	10.4	-0.169	-240	163.8	0.9459	2.96	-2.32	9.614	1	8	1
4	708	7	-0.59	-0.62	2	0.364	10	203	0.9809	3.4	0.47	16.6	1	8	2
2	709	6.5	0.46	0.41	16.8	0.084	-110	233	0.9923	4.41	-0.98	13.8	0	7	1
2	713	8.9	1.84	0.51	-45.5	0.052	403	27	0.995	4.33	0.14	9.9	-1	10	1
4	714	6.8	1.285	1.48	8.5	-0.327	10	-87	1.017	2.67	1.97	9.5	-1	8	2
2	716	8.2	1.42	-0.4	1.8	0.047	71	187	1.039	3.13	0.5	16.8	-1	9	1
4	718	6.4	0.31	0.66	18.3	-0.258	-152	101	0.9934	3.29	0.38	9	0	7	2
5	722	19.2	1.84	0.32	-12.4	0.035	-169	-253	0.9914	2.45	0.6	12.9	0	8	3
5	729	22.7	-0.33	2.56	-46.5	0.054	40	400	1.034	4.73	0.5399	10.8	2	7	3
2	731	0.4	1.45	0.71	2.3	0.045	295	115	1.008	3.17	0.43	8.8	0	9	1
4	733	0.5	0.17	0.31	-19.7	-0.129	13	-233	0.993	2.79	0.37	9.3	0	9	2
2	746	17.5	-0.07	-0.14	-36.2	0.317	29	113	0.9919	3.13	1.2	18.6	0	7	1
4	747	8	0.22	0.42	-33.4	0.894	73	589	1	3.81	0.69	8.6	0	9	2
4	748	11.5	-0.6	0.73	-63	0.052	19	-16	0.9923	3.6	0.6327	11.2	-1	8	2
2	753	9.3	1.03	0.26	-33.8	0.09436	-17	408	1.021	3.29	1.99	9.8	-1	8	1
3	757	7	0.21	-0.09	8.5	0.033	31	177	0.9953	3.22	0.56	2.3	-1	8	2
4	763	7.8	0.16	0.25	1.4	-0.286	214	-42	0.9476	2.82	0.44	11.1	-1	7	2
5	767	17.1	0.14	0.76	-35.6	0.625	26	-284	1.018	3.25	0.45	18.1	1	6	3
2	774	2.3	0.53	0.93	35.6	-0.454	-251	163	1.038	5.76	0.83	10.3	0	7	1
4	776	18.1	0.705	0.96	1.8	-0.213	15	63	0.999	3	1.59	9.5	1	8	2
2	788	11.4	1.375	0.04	2	0.087	12	67	0.9957	3.61	1.61	9.4	0	8	1
4	794	6.4	-0.21	3.19	5.3	0.409	57	-15	0.9953	3.31	1.3	9.8	0	7	2
2	799	-15.4	0.52	0.36	35.9	0.138	41	536	0.9545	3.98	0.38	5.8	0	7	1
5	803	16	-0.17	-0.18	-85.6	0.282	18	156	0.9967	5.03	1.84	9	0	7	3
4	806	16.1	0.24	0.29	-61.5	-0.018	17	117	0.9941	3.36	0.68	6.9	0	8	3
4	807	7	0.42	0.19	3.385	0.071	177	-232	0.9948	3.39	0.56	10.9	0	8	2
5	811	6.2	0.25	1.97	-13.5	0.046	-196	831	0.9945	3.19	0.58	9.3	0	7	3
4	816	3	-1.22	1.36	19.3	0.049	-149	161.8	0.96	5.54	1.25	2.5	2	7	3
4	818	-0.8	1.18	-0.33	-5.4	0.04	83	96	0.9912	3.06	0.61	12.1	0	9	2
4	819	-7	-0.74	0.33	1.8	-0.298	-232	-279	1.04	2.66	0.4	11.14	-1	7	2
5	831	6.9	-1.17	0.38	104.1	0.039	-266	-263	0.9943	4.25	0.42	14.3	1	7	3
5	835	1	0.23	0.33	7.107	0.049	153	183	1.049	4.41	0.9	9.8	1	8	3
2	837	6.3	0.25	0.44	12.1	0.041	48	-142	0.9968	3.18	0.52	9.5	-1	7	1
5	841	19.7	-0.79	0.36	17.2	0.039	22.79	130	0.9995	4.36	-1.11	12.4	1	7	3
2	846	6.3	-0.33	-0.61	4.099	0.048	35	161	1.008	3.14	0.56	10.6	-1	8	1
5	856	6.1	0.23	0.37	7.9	0.02	41.06	150	1.0049	2.86	0.49	5.4	1	7	4
4	861	5	0.7	-0.47	14.35	0.552	-216	-82	0.9988	2.93	-0.63	12.8	1	8	2
5	862	5.3	0.												

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	949	5.8	0.6	0.22	1.3	0.046	18	66	0.9931	4.87	0.55	10.3	1	7	3
2	951	6.1	1.76	-1.1	5	0.042	17	133	1.029	2.55	-1.13	9.4	-1	7	1
4	962	5.8	0.19	0.37	1.1	0.279	31	451	0.9894	3.53	0.48	11.4	0	6	2
2	966	7.4	0.05	0.78	-56.1	0.082	258	82	0.9807	4.52	1.57	14.7	-1	8	1
5	967	4.9	-1.14	1.25	57	-0.38	31	40	0.9849	3.33	0.44	6.433	0	6	4
4	971	6.2	0.45	1.63	13.1	-0.07	3	-87	0.9566	4.52	0.76	9	1	7	2
5	981	8	0.43	1.12	12.4	0.168	29	190	1.016	2.41	2.3	9.2	-1	9	3
4	982	9.4	-0.585	0.68	-16.3	0.08484	3	10	0.9561	2.21	0.71	17.2	-1	10	2
4	983	17.8	0.61	0	-55.8	0.625	168	8	0.9635	2.54	0.37	10.4	0	7	2
4	984	6.1	0.3	0.58	119.3	0.049	258	187	0.9927	1.99	0.85	9.5	1	7	2
4	989	11.6	1.59	0.34	1.6	0.311	33	176	0.9946	2.55	0.98	9.7	-2	10	2
4	990	9.7	-0.18	0.29	14.4	-0.548	54	-91	0.9991	3.17	1.07	8.9	1	7	2
2	992	12.6	-1.04	0.28	4.9	0.042	21	155	0.9939	3.36	0.57	10.9	0	8	1
5	995	7.4	0.18	-0.54	1.5	0.003	-159	316	0.9614	3.43	0.85	16.8	1	7	3
2	996	0.9	0.34	0.57	4.352	-0.157	29	134	0.9946	4.04	1.1	10.7	-1	7	1
2	998	12.6	1.62	-0.46	60.6	0.065	5	253	0.9646	3.27	3.75	11.2	-1	9	1
5	1001	4.6	-2.56	1.41	-61.15	0.045	-86	131	1.003	4.21	1	11.7	-1	8	4
4	1007	6.8	-0.15	-0.24	3.8	-0.254	16	458	0.9969	3.28	1.93	9.5	0	8	2
2	1008	-0.8	0.28	0.29	42.4	0.051	-121	162.5	1.069	3.07	0.99	6	-1	7	1
2	1016	5.9	0.51	1.3	1.4	0.141	52	119	0.9931	4.19	1.73	10.5	-1	6	1
2	1022	6.9	0.24	0.39	55.9	-0.087	223	136	0.9928	2.66	0.3063	15	-1	8	1
5	1027	10.4	0.27	-2.71	7.6	1.228	35	432	1.035	4.62	-0.81	16.1	1	7	3
4	1032	9.2	-0.37	0.28	-39.5	0.043	17	-196	1.015	3.99	0.5173	13.2	1	7	2
4	1033	17	1.44	0.83	6.1	-0.602	-445	-167	0.9905	3.19	2.57	13.7	0	7	2
4	1041	11.1	1.43	1.74	-38.5	0.28	-3	141	0.9962	3.25	0.51	3.3	1	9	3
4	1065	5.6	0.64	1.25	48.1	0.043	21	159	0.9948	3.52	0.5834	18.1	-1	8	2
4	1074	-0.1	0.24	0.31	2.8	-0.427	-122	330	1.018	2.53	-2.37	11.7	0	7	2
2	1075	11.8	-0.25	-0.93	-1.1	0.076	5	17	0.9622	3.36	0.49	3.3	0	10	1
4	1081	-1.7	0.44	1.09	12.1	0.056	68	210	0.9855	4.26	1.19	14.2	-1	8	2
5	1094	5.9	2.83	0.36	-38.2	-0.05	213	805	0.97	3.41	1.25	11.9	0	7	3
4	1099	7.3	0.04	0.3	40.2	0.044	15	144	0.9967	3.49	-0.2	5.8	-1	7	2
2	1105	8.3	0.25	0.19	50.2	0.048	154	654	1	3.03	0.52	9.937	0	9	1
4	1123	17.8	1.62	-1.28	-1.4	0.053	31	696.5	0.9924	2.5	0.72	9.8	1	7	2
4	1135	-2.9	2.1	0.28	11.25	0.305	215	87	0.9922	3.02	0.746	12.4	0	7	2
2	1142	10.7	1.33	1.16	-40	0.29	138	57	1	3.3	0.37	8.8	-1	7	1
2	1155	19.7	0.55	0.28	1.7	0.073	21	165	1.004	2.97	0.82	9.1	-1	8	1
2	1169	7.2	-1.26	-1.17	-37.6	0.049	3	94	0.9506	3.2	0.6125	4.7	0	8	1
2	1176	6	-0.5	0.92	27.7	0.042	-198	61.18	1.014	3.322	0.54	10.8	1	7	1
4	1178	-16.3	-1.21	1.87	1.7	0.034	41	193	1.041	3.25	-0.93	10.4	0	7	2
4	1180	7	1.63	0.24	1.9	0.04	-11	144	0.9739	3.35	0.38	5.6	0	8	2
2	1184	8.9	0.48	0.53	4	0.101	3	-370	0.9959	3.74	0.59	12.1	0	10	1
2	1185	7.8	0.55	0.25	12	0.454	112	186	0.9829	3.11	-0.81	9.3	-1	7	1
2	1193	10.8	0.54	1.36	35.5	-0.317	-195	31	1.019	4.19	0.44	10.6	0	10	1
4	1196	17.6	1.45	-0.11	-35.1	0.444	2	151	0.9946	3.06	0.6	16.3	-1	7	2
4	1199	-13.8	-0.96	0.28	5	-0.48	14	491	0.975	2.19	0.36	9.1	-2	7	2
4	1203	8.6	0.68	0.18	-60.5	0.088	22	-328	0.9979	3.29	1.4	5	-1	11	2
2	1205	11.5	-0.58	1.49	2.2	0.11	14	138	0.9932	3.67	0.5	9.1	-1	7	1
2	1207	6.7	0.15	1.36	-0.757	-0.507	-208	-657	0.9946	3.97	-1.31	10.2	-1	7	1
2	1208	6.4	0.31	-0.61	2.5	0.039	-494	192	0.9895	3.22	0.38	12.7	0	7	1
2	1212	13.3	0.73	0.43	56.9	0.03632	-20	269	0.9966	3.15	0.62	11	-2	11	1
4	1213	7.3	0.59	0.26	7.2	0.046	35	105.6	1.017	3.37	0.5191	8.7	0	8	2
2	1222	7.3	0.17	-0.85	-22.9	-0.111	-116	352	0.9951	3.23	-1.11	12	-1	8	1
2	1223	6.6	0.21	0	3	0.115	-44	421	0.9853	3.45	-0.86	5.2	0	7	1
5	1226	8.5	0.19	0.49	-36	-0.362	-218	117	0.9938	3.171	0.51	12.8	0	9	3
5	1227	8.3	2.26	-1.2	1.8	-0.427	28	230	0.9907	2.09	1.96	9.3	2	7	3
2	1229	14.5	0.29	-1.09	30.2	-0.37	86	160	0.9944	3.14	0.47	10.69	-1	8	1
5	1230	5.3	-0.71	-0.14	-27.9	-0.513	36	-215	1.038	3.26	0.33	14.6	0	6	3
2	1231	6.3	1.59	0.23	2.9	0.047	127	365	1.02	3.28	0.48	8.5	0	7	1
2	1241	0	2.17	1.43	2	0.083	17	242	0.9962	4.35	0.08	9.8	-1	8	1
5	1243	6.1	0.64	0.27	-50.9	0.048	30	298	0.995	3.21	0.51	9.9	0	7	3
5	1244	7	-0.7	0.23	5.7	0.123	-108	312	0.9954	3.04	0.54	9.4	1	7	4
5	1246	6.9	-1.03	0.28	2.2	-0.378	39	93	0.9891	3.31	0.43	11.29	0	7	3
2	1248	6.8	-0.4	0.01	16.1	0.444	330	196	0.9862	3.15	-0.58	9.3	-1	7	1
4	1249	13.5	-1.09	0.22	-23.4	0.025	-169	216	0.9522	3.33	0.6	9.6	0	7	2
4	1252	8.1	-1.02	0	10.44	0.043	57	176	1.012	3.86	0.55	6.3	0	9	2
2	1261	6.7	-0.8	0.44	24.4	0.048	39	137	0.9942	3.24	0.35	11.4	1	7	1
5	1275	7	0.15	1.05	-23.9	0.051	29	149	1.029	2.96	0.92	9	-1	7	3
2	1281	8.4	0.35	0.24	27.3	0.034	531	133	0.9906	3.34	-0.87	12	0	7	1
5	1285	8.3	0.19	2.04	48	0.037	-152	180	0.9926	3.06	0.4644	10	0	9	3
5	1288	12.8	1.52	-0.16	59.4	0.065	56	235.5	0.9568	4.48	0.41	12.7	1	8	3
4	1290	7.4	0.4	-0.86	10.1	0.112	37	194	0.9834	3.2	0.63	11.7	0	8	2
4	1291	0.1	-0.96	0.31	1.3	0.448	47	98	0.9891	3.42	0.5	10.1	0	8	2
4	1304	7.8	0.57	-0.99	9.9	0.577	108	181	1.042	3.19	0.04	10.9	1	8	2
5	1305	8.6	0.26	-0.66	2.2	0.254	6	169	0.9903	4.64	0.42	12.9	-2	8	3
4	1323	-1.3	0.23	0.35	-12.1	0.174	128	212	1.011	3.34	1.41	8.9	1	8	2
4	1342	6.7	1.74	0.66	8.9	-0.334	75	111	0.9968	3.25	0.6442	11	0	7	2
2	1348	6.5	0.09	-0.99	-32.2	0.09875	-12	166	0.9849	4.46	0.2228	3.2	-1	7	1
4	1353	4.5	0.03	0.41	1.3	0.044	25	171	0.9929	3.28	0.93	10.3	0	8	2
4	1363	7.9	0.705	0.26	29.2	0.057	40	190	0.9932	2.76	0.39	17.4	-1	8	2
4	1371	3.3	-0.39	0.58	8.2	0.359	-252	1.021	0.9928	3.28	1.27	12.2	0	8	2
4	1372	7.7	0.22	-1.19	-44.8	0.029	41	-7	1.021	3.22	0.99	15.5	-1	8	2
4	1378	8.3	1.18	0.38	1.1	0.038	249	75	0.9625	2.06	0.43	9			

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	1497	-3.1	1.56	0.23	-0.316	0.258	-43	9	0.9637	4.04	2.12	13.1	1	8	3
2	1515	-0.2	-0.63	0.24	17.8	0.643	21.09	124	0.9731	4.3	0.45	10.1	0	6	1
2	1519	-1.4	0.43	0.41	-34.3	-0.542	103	167	1.042	3.16	0.53	8.9	0	8	1
4	1522	7.4	0.32	0.55	7.7	0.056	-183	238	0.9135	2.96	0.58	8.7	-1	8	2
2	1526	5.8	0.17	0.34	44.7	0.602	96	377	0.9823	3.94	1.62	10.2	1	6	1
2	1537	5.3	-0.96	-1.06	1.2	-0.979	48	119	1.042	2.89	2.38	14.1	0	8	1
5	1538	6.5	0.24	0.29	4.776	-0.147	-9	424	0.9681	3.13	0.7	10.1	0	7	3
2	1540	17.3	0.33	0.34	1.4	0.056	-161	528	0.9946	5.01	0.47	5.4	-1	10	1
4	1543	-14.5	0.28	0.1	33.5	-0.17	29	224	0.9774	3.27	0.6137	10.6	0	8	2
4	1548	18.2	-0.67	0.29	3.974	0.05	41	89	0.9956	1.37	0.54	9.8	-1	8	2
2	1549	16.5	0.18	0.48	-6.9	0.186	64	-6	0.9945	2.39	0.4	17	0	7	1
4	1556	13	1.37	1.14	8.6	0.06	112	-164	0.9935	3.08	0.26	8.5	-1	8	2
2	1564	7.4	-0.87	0.42	59.6	-0.169	48	280	0.9979	1.98	0.42	13.8	0	8	1
4	1570	5.6	0.3	-0.65	-8.3	0.419	-94	142	0.9878	4.8	-0.07	4.5	-1	6	3
2	1577	7.2	0.95	0.18	2.1	-0.413	-171	31	0.9976	3.66	0.83	9.6	-1	8	1
5	1585	6.3	1.28	1.44	6.6	-0.097	203	356	0.9948	3.1	0.4	8.4	0	7	3
4	1590	7.5	0.26	0.59	11.8	0.046	59	-140	1.033	3	0.46	6.2	1	8	2
4	1592	6.5	0.31	0.14	13.5	0.044	34	-255	0.9797	2.98	1.07	11.7	-1	7	2
2	1594	11.9	1.57	1.42	22.5	-0.062	155	-37	0.9953	3.12	0.55	6.6	-1	8	1
5	1596	-4.1	0.37	1.37	1.9	0.024	-64	106	0.9899	3.45	0.6	12.6	2	7	4
5	1598	16.4	0.24	1.93	2	0.041	14	-102	0.9601	3.04	0.45	11.6	0	6	4
2	1603	-16.1	-0.15	-1.47	5	0.33	-183	526	0.9586	3.171	0.71	3.7	0	6	1
2	1607	13.7	-0.46	-1.24	-109.2	0.054	7	-276	0.9951	2.26	1.06	11.5	-1	8	1
5	1612	7.2	-0.53	0.39	30.2	0.053	26	393	0.9917	3.31	3.55	10	1	8	4
4	1627	-0.8	0.26	2.65	-8.1	0.121	322	119	1.025	2.65	0.61	10.94	1	7	2
2	1629	6.5	-0.32	-0.36	3.4	-0.532	34	186	0.9937	3.14	0.76	10	1	7	1
4	1630	6.2	-0.74	1.07	1	-0.289	-232	148	0.9927	3.207	0.45	14.3	-1	7	2
5	1640	16.3	1.09	0.36	6.237	0.031	144	268	1.038	3.28	2.59	10.68	1	8	4
5	1641	4.4	0.3	1.66	1.4	0.032	-1	161	1.012	2.9	0.42	15.4	0	8	3
4	1646	5.5	-0.5	0.03	1.8	0.573	14	87	1.024	3.69	1.49	14	0	6	2
2	1662	10.3	1.26	0.31	8.454	-0.238	245	-17	0.9982	2.93	0.32	11.5	1	9	1
5	1668	11.1	1.39	0.08	4.4	0.373	14.89	32	0.9965	3.56	1.56	11.8	0	7	3
4	1671	9.7	0.69	1.7	40	0.088	-56	91	0.9968	2.82	0.62	10.1	1	11	2
5	1672	-1	0.27	0.42	48.6	0.097	45	444	1.045	2.13	-0.67	12.3	0	7	3
6	1673	24.4	0.27	0.48	-46.8	-0.551	17	132	0.9914	3.19	0.5266	16.5	1	8	4
4	1686	-4.2	-1.19	0.17	1.6	-0.144	-78	129	0.9763	3.22	0.84	11.4	0	6	2
5	1688	6.8	0.75	0.49	44.1	0.142	52	-225	0.9937	3.49	2.11	9	0	8	3
5	1696	-11.6	0.18	-0.88	-16.6	0.047	60	-142	0.9597	3.93	2.49	10.5	-1	7	3
5	1701	1.5	-0.22	1.6	-115.8	0.573	30	96	1.039	4.18	1.94	13.1	0	7	4
4	1707	5.8	-0.53	-1.32	-50.1	0.038	49	133	0.9641	3.16	0.5293	11.7	0	6	2
2	1708	10.3	0.18	0.3	6.4	-0.026	243	251	0.9956	2.99	0.52	8.6	1	7	1
4	1713	6	1.67	1.51	-46.4	0.422	50	48	1.016	3.3	1.67	8.5	0	6	2
5	1715	2.2	-0.31	-1.38	4	0.023	46.72	237	1.008	2.68	0.4217	11.6	-1	7	3
2	1717	6.7	1.67	-1.15	49.05	0.041	118.5	216	0.9949	2.27	0.66	15.5	0	7	1
4	1721	6.6	0.26	0.29	0.5	-0.42	82	114	0.9929	1.7	0.38	10.5	-1	7	2
2	1724	7.2	0.16	-1.09	-3.663	0.16	42.92	84	0.9901	3.33	1.61	13.9	0	8	1
4	1725	6.6	0.17	1.35	109.7	0.416	-106	-123	0.9921	3.13	0.45	10.2	-1	7	2
4	1730	6.2	0.89	1.92	4.6	0.031	261	73	0.9903	3.37	0.52	11.3	0	7	2
5	1731	6.8	3.17	0.14	6.9	0.118	32	133	0.9625	3.27	-1.23	7.7	0	7	3
2	1734	-0.2	0.33	0.32	4.6	0.041	31	227	0.983	3.05	0.74	15.1	2	9	1
2	1740	6.7	0.27	-1.28	-23.9	0.036	44	179	1.099	2.88	2.09	9.6	1	7	1
2	1748	14.1	0.21	0.28	36.5	-0.535	29	-132	0.9928	4.9	1.53	11	0	7	1
4	1749	17.5	0.47	0.99	2.4	0.074	515	29	0.9979	3.08	-0.87	9.5	1	10	2
5	1750	7.4	0.21	0.3	8.1	0.047	13	-128	1.031	1.95	0.35	12.1	1	8	4
2	1763	0.8	-0.71	-0.49	2.5	-0.512	31	-137	0.9901	2	0.5	11.3	0	7	1
5	1768	3.5	0.2	-0.76	-34.1	0.382	450	-116	0.9899	4.61	0.16	10.8	0	6	3
2	1773	-15.8	0.32	0.41	2.2	0.1014	24	260	0.9978	2.21	-2.47	9.5	-1	9	1
4	1777	2.2	0.13	-0.73	16.1	0.037	13	101	0.9317	3.17	2.05	17.9	1	7	2
2	1778	11	0.48	0.24	-15.7	0.102	13	35	1	3.08	0.56	10	0	11	1
2	1780	11.5	-0.19	0.31	51.9	-0.251	446	510	0.99	3.06	0.45	11.8	0	7	1
4	1782	20.5	1.46	-1.27	-27.2	0.499	12	7	0.9833	3.16	0.7	13.9	0	10	2
4	1784	11.8	0.24	0.41	8.7	-0.115	306	-271	0.9735	3.22	0.62	12.5	1	7	2
4	1786	7.9	0.63	0.99	14.1	-0.756	238	148	1.029	3.16	0.5	10.09	0	8	2
4	1787	11.2	0.255	0.65	-22.7	0.627	-237	253	0.9931	4	0.4484	10.4	1	7	2
4	1792	7.1	1.53	0.4	6.3	0.172	-72	-188	0.9957	3.28	1.57	12	0	9	2
2	1800	6	0.05	0.95	1.8	0.03	27.99	105	0.9895	3.31	-0.16	10.7	-1	6	1
4	1801	8.4	-0.43	1.94	14.9	0.032	60	339	1.02	4.16	0.61	8.6	-1	8	2
2	1803	6.9	0.35	0.98	-10.9	0.076	238	137	1.047	2.94	0.81	11	0	9	1
5	1804	6.9	-0.59	0.5	19.25	0.043	-169	590	0.9995	2.93	1.83	9.1	-1	7	3
2	1807	6.3	2.93	-0.91	2.5	0.035	281	830	0.9468	2.46	0.47	13.3	-1	7	1
5	1818	7.5	-0.05	0.47	-36	0.058	26	111	0.9983	2.56	0.34	10.7	2	8	3
2	1821	15.3	0.27	0.19	48.7	0.085	147	169	0.9506	2.36	2.32	7.2	1	7	1
5	1822	-12.4	-1.15	0.22	53.8	0.046	18	66	0.9657	5.06	-0.51	10.3	0	7	3
2	1828	17.2	0.26	0.3	2	0.453	13	930	1.011	3.61	0.49	15	0	8	1
4	1833	14.1	0.67	0.86	61	-0.41	-199	115	0.9909	4.13	2.14	11.56	0	6	2
4	1844	6.2	2.82	0.2	1.6	0.069	-214	196	0.9899	3.41	0.56	6.4	0	7	3
2	1847	5.8	0.26	0.24	65.6	0.044	55	-67	0.9719	4.11	1.41	10.5	0	6	1
2	1850	15.6	0.21	0.28	66.7	0.159	288	241	0.954	3.25	0.72	8.5	1	7	1
4	1854	7.6	0.22	-0.32	12	0.056	221	495	1.017	2.99	0.3	9.2	0	8	2
5	1858	-1.3	0.5	0.38	7.5	0.81	-10	-252	1.004	3.87	-0.07	9.1	1	8	3
5	1864	7	1.98	0.17	3.925	0.123	15	-263	0.9951	3.44	1.07	10.55	0	8	3
2	1867	8.7	0.38	1.32	27.3	0.272	-81								

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	2004	11	0.25	0.36	2.1	0.034	30	189	1.003	3.25	-0.6	6.3	0	8	3
5	2011	6.9	0.36	0.35	8.6	-0.131	37	-315	1.028	3.81	0.32	12.4	0	8	4
2	2015	16	-0.45	-0.11	44.5	0.402	-3	111	0.9601	2.07	0.62	7.6	1	7	1
6	2025	8.7	0.26	0.29	2.1	0.033	211	17	0.9909	3.33	-0.26	16.4	2	8	4
4	2033	8.1	-0.87	1.69	1.2	0.02825	49	-64	0.9809	3.13	0.98	9.7	0	9	2
4	2034	2	0.3	-0.19	45.7	0.042	21	582	0.9917	3.046	0.57	11.4	1	8	2
2	2035	6.2	-0.4	0.63	30	0.01884	-29	362	0.9952	2.64	0.37	10.7	0	7	1
2	2036	6	-0.48	-0.96	1.2	-0.354	192	124	0.9918	3.08	0.46	13.6	-2	6	1
2	2053	6.7	0.58	0.62	1.8	0.893	-33	65	0.974	3.28	0.54	1.9	0	7	1
5	2059	11.5	0.54	0.24	10.6	0.124	45.37	132	0.985	2.62	1.7	11.8	-1	13	3
4	2060	5.2	0.44	0.02	62.2	0.036	43	257	0.9938	2.88	0.13	18.7	-1	6	2
2	2073	7.3	0.25	-0.04	69	-0.704	35	200	0.9628	3.04	0.4356	8.9	0	8	1
2	2084	6.9	0.91	-0.33	-48.8	-0.067	334	190	0.996	3.22	0.48	9.4	0	7	1
5	2089	8.6	1.84	-0.1	66.5	0.035	49	804	1.021	0.62	0.34	10.5	-1	6	3
4	2092	6.8	0.24	0.95	3.2	0.049	-265	161	0.9526	3.1	0.69	7.9	-1	7	2
5	2109	5.5	0.31	-0.97	-33.3	-0.348	36	148	0.9928	3.28	0.41	13.3	0	7	4
5	2129	10	0.35	1.46	-119.9	0.069	-157	281	0.9994	3.15	0.43	13	1	11	3
5	2134	8	1.55	-0.69	79.9	0.285	13	18	0.9987	2.83	0.55	9.5	2	9	3
4	2135	4.4	0.32	0.39	-54.8	-0.026	31	559	0.989	2.96	-0.49	15.6	1	5	2
2	2148	7.4	0.31	-0.65	-20.8	0.09979	273	204	1.013	3.55	-0.06	13.2	1	8	1
4	2149	11.8	0.58	0.2	19.3	0.642	34	44	0.9949	3.1	0.7101	9.3	1	8	2
2	2150	7.6	-0.22	0.28	27.9	0.398	29	451	1.044	2.86	-0.03	4.2	-1	8	1
2	2165	7.1	0.86	0.35	-97.8	0.046	60	590	0.999	3.16	0.59	9.1	0	8	1
2	2166	1.5	0.18	0.74	66.6	1.071	68.47	528	1.012	3.89	0.67	12.4	0	8	1
5	2168	6.6	0.78	-0.35	14.4	-0.0388	264	183	1.034	3.02	0.5	2.9	0	7	4
2	2170	8.4	-0.65	0.42	58.8	0.554	7	77	0.9932	2.48	0.45	11.7	-2	9	1
2	2171	6.7	0.24	0.33	12.3	0.046	-53	-177	0.9983	2.93	0.4	9.5	-1	7	1
2	2172	-2	0.33	0.36	-40.4	0.034	19	-219	0.986	3.65	0.98	12.7	1	9	1
5	2176	6.3	0.4	-0.38	-3.1	-0.342	-112	220	0.9575	3.8	0.55	11.3	1	7	3
4	2182	5.8	-0.18	0.66	2	0.039	-185	88	1.028	4.03	0.93	11.5	-1	7	2
2	2189	7.9	0.37	0.31	0.35	0.042	36	-246	1.006	3.49	0.36	12	-1	9	1
4	2191	0.3	0.26	-1.23	2.6	-	112	0.9902	3.46	0.38	11.5	1	6	2	
					0.01483										
2	2197	5.9	0.22	0.27	11.5	0.312	81	157	0.9928	3.05	2.24	14.9	0	7	1
5	2202	8	1.08	0.1	-47.7	-0.139	284	68	0.9893	2.43	-0.28	17.1	1	9	3
4	2203	8.2	-0.08	0.44	-27.1	0.089	358	-247	0.9975	3.53	0.61	10.5	0	9	2
2	2204	11.9	0.4	1.7	2.15	0.068	44	411	0.9988	3.72	0.68	6.8	-1	13	1
4	2206	5.8	1.34	0.32	6.06	0.037	111	119	1.001	3.78	1.82	10.2	1	6	2
2	2218	6.2	1.69	0.65	44.6	0.102	32	284	0.9666	3.87	0.71	9.8	0	11	1
4	2219	11.4	1.37	0.32	15.6	0.249	-200	90	1.012	3.37	0.92	11	0	7	2
2	2221	6.8	-0.7	-0.13	11.3	0.017	16	61	0.9605	4.57	0.6	9.3	0	8	1
2	2226	1.6	0.69	0.41	2.3	0.079	24	37	0.9951	2.33	-0.24	14.9	0	8	1
4	2228	5.1	0.41	0.33	73.8	0.043	37.23	152	0.9697	3.2	1.75	9.4	-1	8	2
4	2232	13.9	0.7	0.38	1.2	0.029	73	132	0.9397	4	0.3263	7.3	0	6	2
3	2236	9.4	1.55	1.86	-21.5	0.494	-339	445	1	3.28	2.75	4.1	0	12	2
2	2241	6.2	-1.815	0	2.1	0.06	6	60	0.9968	4.41	0.35	10	-1	7	1
5	2245	7.1	0.29	-0.25	1.2	-0.442	183	406	0.9893	3.24	-1.02	11.8	1	8	3
5	2251	3.8	-1.11	1.26	21.7	-0.308	58.01	90	0.9944	2.76	0.42	10.5	-1	9	3
5	2255	7	0.55	0.22	0.6935	0.154	88	801	1.012	3.66	0.49	16.7	1	7	3
4	2256	6.7	0.23	-1.2	9.3	0.172	63	-112	0.9937	2.48	0.96	12.9	0	7	2
5	2259	6.4	1.41	-0.7	9.1	0.044	35	-129	1.007	1.83	1.78	11	0	7	3
4	2263	7.2	-0.49	0.32	8.622	0.022	-120	116	0.9922	3.04	0.67	5.3	0	8	2
4	2264	4.2	0.39	0.35	2.867	0.044	251	421	0.9941	3.17	0.5621	10.17	0	8	2
4	2267	7	1.09	1.31	2.1	-0.451	15	31	0.993	3.2	3.31	14.7	0	8	2
2	2273	7.8	0.59	0.18	2.3	0.097	-238	131	0.9975	3.43	1.66	10	-1	9	1
4	2277	6.9	1.11	-1.08	14.2	-0.2	40	94	1.018	3.47	-1.22	9.6	1	7	2
5	2287	2.6	-0.67	-0.53	1.6	0.333	9	458	0.9967	3.07	0.95	11.2	0	11	3
4	2289	5	0.255	1.46	2.7	-0.483	46	153	0.9924	2.96	0.76	10.4	-1	5	2
4	2291	7.9	0.03	-0.91	4.9	-0.01	31	519	0.9966	2.85	0.51	9.7	-1	9	2
2	2296	8.9	1.23	0.26	30.2	0.041	-90	187	0.9953	4.18	0.61	9.5	-1	10	1
2	2299	6	0.14	-0.75	5.683	-	138	168	0.9919	2.45	0.44	11.39	-1	7	1
					0.00957										
4	2306	3.8	1.13	1.38	9.6	0.027	-102	243	0.9528	3.99	-0.85	13.1	-1	7	2
5	2314	-3.7	-0.48	0.38	-15.4	0.324	-444	4	0.9966	3.4	-1.15	15.9	1	9	3
2	2317	3.7	1.32	0.38	0.95	0.033	89	159	0.9753	3.34	0.42	8	-1	5	1
4	2318	-4	1.58	-1.1	6.3	0.051	26	229	0.994	3.36	0.87	6.3	0	8	3
5	2321	1.9	-0.47	0.61	7.9	0.536	53	-128	0.9769	2.57	1.67	9.6	0	7	3
4	2324	7.2	1.59	0.24	42.8	-	19	-114	0.9918	3.14	0.59	12.8	1	8	2
3	2340	6.4	0.26	-0.06	7.1	0.04	35	509	0.9494	3.39	3.83	3.3	-1	7	2
4	2343	8.1	-0.51	2.12	-86.7	0.055	58	146.8	0.9968	2.46	0.8	13.4	-2	8	2
2	2349	2.1	-0.82	1.07	51.6	-0.418	31	12	0.996	3.52	0.47	12.7	-1	9	1
5	2352	7	0.3	0.49	4.577	-0.19	-18	49	0.9655	3.23	-0.45	12.4	1	8	3
2	2353	6.2	0.6	-1.04	0.7	0.051	-254	111	0.9916	3.37	2.85	11	-1	7	1
2	2365	0.6	-1.88	0.33	2.7	-0.247	195	121	1.025	3.22	0.68	10	0	11	1
4	2370	-15.8	0.18	0.34	63.3	0.066	-139	164.6	0.9788	2.81	1.8	11.8	0	8	2
4	2378	5.8	1	0.2	2.6	0.027	39.96	123	0.9615	3.36	0.78	13.9	-1	6	2
2	2390	8.9	1.18	0.91	4.6	0.032	-13	212	0.9946	3.15	0.28	11.5	-1	10	1
4	2399	25.8	-0.49	-0.96	44.8	-0.751	13	289	0.9623	4.4	0.84	4.9	1	8	3
4	2402	11.1	0.13	0.92	-26	0.474	-46	172	0.9938	3.23	0.39	7.4	0	8	2
4	2403	6.9	0.41	-0.93	9.9	0.079	54	-278	0.9668	3.47	0.55	12.9	1	8	2
5	2404	6.8	0.26	-0.34	34.7	0.06	42	162	0.997	2.11	-1.19	13.2	0	7	3
5	2414	6.3	0.17	0.32	54.2	0.43	267	92	1.064	3.24	0.43	15.4	1	7	3
4	2422	14	0.13	1.33	-39.65	0.315	36	105	0.96	4.08	0.5				

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	2543	6.3	0.23	0.49	8.486	0.145	67	210	0.9703	2.16	1.06	11.3	1	7	2
4	2545	7.6	1.1	0.6	-57.7	0.368	23	381	1.04	3.38	-0.98	10.5	1	9	2
5	2561	5.8	0.18	1.87	27.4	0.00902	222	418	0.9887	2.96	0.34	12.1	-1	6	3
4	2566	7.4	1.59	0.24	-38.2	0.31	255	150.2	0.9953	3.13	0.51	12	0	8	2
2	2572	14.3	1.48	0.26	-14.9	0.127	-40	255	0.9951	3.72	0.37	12.9	0	7	1
2	2577	6.8	0.19	2.1	50	0.038	124	164	0.9849	3.12	0.48	4.9	1	8	1
4	2578	0.4	0.69	1.49	60.3	0.069	35	182	0.9939	3.11	0.46	12.73	0	6	2
2	2580	8.4	2.41	0.4	-40.9	0.067	-214	20	0.996	4.22	-0.29	10.5	1	9	1
5	2581	11.8	0.2	0.31	3.6	0.036	22	183	0.9599	3.41	0.5	9.8	0	6	3
4	2582	0.8	0.44	0.36	-25.7	0.116	-112	178	0.9976	3.01	0.48	13.4	1	8	2
2	2584	7.3	0.18	-1.25	13.5	0.055	-45	197	1	4.01	0.4199	14.4	0	8	1
5	2590	3.1	0.27	0.32	4.5	-0.231	29	178	1.008	3.45	-0.42	12.1	0	6	3
4	2598	4	-0.61	0.3	27.1	1.201	18	275	0.9266	3.88	1.94	9.6	-1	8	2
2	2602	6.2	-0.97	0.29	2.1	-0.225	123	98	1.068	4.3	0.6649	9.8	0	7	1
5	2605	1.2	-1.22	-0.61	-16.1	0.052	38	231	0.998	2.82	1.53	10.33	1	8	3
4	2616	13.8	0.36	0.38	-27	0.028	107	318	0.9927	2.74	0.43	12.1	0	7	2
4	2618	7.2	0.35	-1.26	28	1.145	-16	75	1.019	3.4	3.41	9.5	0	8	2
2	2619	6.3	-0.015	0.22	2.144	-0.109	26	141	0.9982	2.88	0.5	10	-1	7	1
4	2624	9.6	1.65	1.94	-26.2	-0.241	-11	156	1.04	3.25	0.36	4.1	1	7	3
4	2632	6.5	-0.88	-0.43	1.5	0.062	44	-51	0.9928	2.66	0.44	13.3	0	7	2
4	2640	-10.1	0.26	0.21	57.9	-0.142	237	125	0.997	3.06	0.73	10.7	0	7	2
5	2646	6.7	-0.78	0.29	5.3	0.586	31	122	0.9895	3.44	0.79	16.5	0	7	3
5	2651	7.2	-2.07	-0.97	1.4	0.316	5	85.69	0.9662	4.26	0.12	7.3	1	8	3
4	2660	9.1	0.3	0.74	19	0.265	293	-188	0.9945	3.21	0.46	9.9	0	8	2
5	2661	7.1	-0.33	1.47	-6.4	0.129	-135	87	0.9821	3.26	0.81	25.6	-1	8	3
4	2668	15.4	1.87	1.61	2.7	0.119	304	80	1.004	3.03	0.37	11.3	-2	7	2
5	2670	-1.3	0.21	-0.38	35.4	-0.358	49	115	1.043	4.13	1.26	-0.2	1	7	4
2	2680	18.8	0.31	-0.27	1.6	0.021	-138	67	0.9924	3.08	0.25	10.5	1	9	1
4	2681	28.6	-1.17	-0.49	-49.4	0.029	168	474	0.9585	2.34	0.42	12.9	-1	6	2
4	2689	6.5	-0.81	-1.02	6.682	0.053	119	176	1.01	3.4	0.553	7.2	0	9	2
4	2694	10.9	1.37	0.26	13.2	0.046	57	553	0.9869	3.17	0.41	14	2	7	2
2	2695	10.5	1.52	-0.35	11.9	-0.4	244	145	1.08	4	0.6441	8.4	0	7	1
2	2696	6.2	0.34	0.28	7.5	0.03524	40	197	0.9949	3.04	0.6	9.7	0	7	1
2	2702	11.5	0.75	0.13	6.3	0.467	19	46	0.9521	2.84	0.25	11.1	0	8	1
4	2704	17.3	-0.53	-0.65	-20	0.36	30	-261	0.9917	1.97	0.39	11.4	0	9	2
5	2708	7.8	0.41	0.73	-7.1	0.24	25	56	1.045	2.08	1.67	10.5	1	10	4
2	2709	9.5	-0.62	0.34	6.7	0.621	21	162	1.035	3.67	1.56	10.6	1	10	1
5	2714	8.1	0.91	0.62	-26.6	0.034	30	177	0.9909	2.44	0.5011	11.07	0	8	3
4	2716	15.9	1.69	2.14	7.5	0.558	22	71	0.8974	2.32	0.7564	8.8	1	17	2
2	2723	7	0.58	1.41	-41.3	0.091	35	-112	0.9956	3.7	0.48	8.8	0	8	1
4	2725	5.4	-1.17	2.32	3	0.052	51.14	-123	0.993	3.71	0.75	5.4	-1	6	2
5	2738	13.8	0.9	-0.81	20.7	0.093	94	132.5	0.9543	3.73	1.88	12	2	15	3
4	2750	14.9	0.32	0.2	1.1	-0.166	155	8	0.9928	3.24	1.24	11.3	0	7	2
4	2756	11.8	-1.09	0.53	-49.5	0.051	-158	247	1.011	3	1.1	12.1	0	7	2
5	2758	1.9	0.27	-0.77	-10.7	0.05	41	143	0.99	3.063	1.77	12.4	0	9	3
2	2766	7.3	0.175	-0.56	2.5	-0.491	165	184	0.9966	3.36	0.1641	11	0	8	1
5	2767	1.4	-0.95	-0.93	-7.2	0.104	10	22	0.9612	3.39	0.68	10.6	1	9	3
4	2771	6.4	1.65	1	56.9	0.046	53	149	1.024	3.21	0.89	10.8	-2	7	2
4	2775	7.9	0.17	0.32	-61.1	0.053	68	138	1.04	2.93	1.86	9.6	0	8	2
4	2776	8.2	-0.51	-0.26	53	0.062	-35.76	80	0.9897	3.1	0.53	7	-1	9	2
2	2779	5.8	0.42	0.31	-19.9	0.052	55	230	0.9949	4.12	0.46	9.8	0	6	1
2	2780	16.1	-0.45	0.87	-25.7	0.053	51	202	0.9955	3.24	-0.03	1.2	0	7	1
5	2781	15.9	-0.9	1.2	2.4	0.086	-100	439	0.9585	3.4	0.53	10.1	0	8	3
5	2782	5.7	0.7	0.32	8.2	0.043	28	-50	0.9411	3.31	-0.5	12.6	0	6	3
4	2783	6.9	0.17	0.54	67.1	0.064	-153	-198	0.999	3.29	0.37	9.3	0	7	2
4	2796	17.2	0.2	0.49	30	-0.473	421	1038	3.26	-0.68	18.4	0	9	2	
4	2798	9.2	1.55	0.27	0.9	0.185	-150	61	0.9977	3.59	-0.88	6.3	2	10	2
2	2800	-0.6	-0.385	0.36	32.5	0.414	-117	120	0.9931	2.02	0.518	14.1	1	8	1
5	2803	6.3	0.21	0.58	-50.3	0.081	34	-1	1.022	3.16	-1.15	11.25	2	7	4
5	2806	4	-0.58	0.4	-59	0.034	-137	150.3	0.9914	3.21	1.21	12.1	1	6	3
4	2813	-1.8	-0.4	0.43	11	0.155	-225	132	0.9907	1.9	-0.91	8.8	-1	8	2
2	2818	2.6	0.21	0.31	-69.3	-0.46	-95	61	0.9461	4.48	1.29	12	-1	6	1
5	2821	1.5	0.45	0.27	0.8	-0.286	-115	335	0.9838	2.21	-0.37	11.82	1	7	3
5	2825	6	0.28	0.38	1.3	0.111	37	104	0.9887	3.2	-0.86	12.3	0	7	3
2	2829	3.9	0.33	1.24	-28.8	0.567	-157	200	0.9671	2.17	-2.86	2.6	-1	10	1
2	2830	6.7	0.18	-1.23	10.2	0.039	17	296	0.9573	3.11	0.53	4.6	0	7	1
4	2833	7.8	0.21	1.47	-45.6	0.039	181	140	0.9959	2.32	0.31	4.2	0	8	3
2	2839	7.2	0.57	0.06	44.4	0.082	-55	129.4	0.9972	3.36	-0.59	21.6	-1	8	1
5	2843	7.6	1.64	1.05	1.4	-0.195	41	142	0.9934	3.88	0.53	10.1	0	8	4
4	2846	7.3	-0.475	0.2	10.2	0.631	296	212	1.012	2.96	0.58	9.2	1	8	2
2	2847	7.2	0.16	0.05	5.399	0.037	164	104	0.9924	3.23	1.73	16.2	1	8	1
6	2848	18.1	-0.215	0.4	9.037	-0.49	301	154	1	3.35	0.6588	14.5	1	8	4
2	2856	8.5	0.12	0.26	4.3	0.038	284	97	0.9948	2.38	0.5772	9.2	1	6	1
4	2863	7.1	1.32	0.95	-4.6	0.621	-185	-37	1.073	3.1	0.49	14.2	1	8	2
5	2867	-3.3	0.22	1.56	1.669	0.052	-288	373	0.991	3.96	0.35	8	1	8	3
4	2886	6.7	0.24	-2.27	-25.45	0.432	350	-101	0.9919	4.3	0.59	8.3	-1	7	3
4	2887	21.1	0.52	-0.55	-48.5	0.055	-71	55.95	1.022	3.27	0.5	8	0	8	2
4	2888	11.3	-0.96	-0.49	-8.8	0.084	7	250	0.9983	3.08	-0.13	14.7	0	12	2
2	2889	7.5	0.28	1.46	1.6	0.071	33	-6	0.9985	3.19	2.11	10.2	-1	7	1
5	2890	5.6	0.18	-0.48	-6.1	0.549	-68	47	0.9472	3.94	-0.23	14.7	1	6	3
2	2892	-4.2	0.27	0.33	-3.1	0.042	224	183	0.9921	4.1	-0.84	10.7	-1	7	1
2	2901	7.2	0.69	0.72	1.2	-0.514	32	180	0.989						

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	2986	6.1	0.1	1.31	2.1	0.031	50	416	0.9517	3.39	0.72	18.6	0	7	3
5	2988	6.7	0.22	-0.35	1.2	0.394	313	86	1.001	3.1	0.33	16.6	1	7	3
4	2989	6.8	0.31	-0.09	-20.9	0.052	35	143	0.9959	3.14	0.6282	9	1	7	2
4	2995	5.4	-2.265	-0.55	43.5	0.292	36	110	0.9944	3.26	0.41	9.5	0	6	2
4	3005	7.8	1.76	1.01	-90.5	0.033	37	427	0.994	1.14	0.35	6.4	1	9	3
5	3011	22	-1.15	1.41	10.5	0.043	49	228	0.9974	3.83	-0.84	10.4	1	10	3
2	3013	6.4	-0.5	-0.48	-38.6	0.152	23	480	0.9814	4.29	0.56	12.4	0	7	1
4	3019	-4.6	0.23	-0.23	67.3	0.044	52.26	-54	0.9983	3.22	0.62	6.6	0	8	2
2	3021	6.8	-0.33	-1.25	21.9	0.052	583	127	0.9933	3.04	0.54	8.9	-2	7	1
5	3022	6.4	0.18	0.33	4	0.186	98	-16	0.943	3.06	0.4	9.3	1	7	3
2	3029	0.8	0.25	-0.62	2.5	0.541	5	210	1.011	3.52	0.94	5.6	-1	8	1
4	3037	7.7	0.26	0.3	-2.752	0.287	20	38	0.9258	3.29	1.61	7.6	0	8	2
2	3042	4.4	0.45	0.07	11.16	0.331	10	123	1.007	2.97	-0.68	10.8	-1	7	1
4	3043	16.1	0.125	0.07	54.6	0.044	361	68	0.9901	2.1	0.5	12.4	0	7	2
4	3049	-4.5	0.21	-1.15	121.2	0.046	237	216	0.9837	3.25	1.9	17.5	0	8	2
5	3050	16.6	-0.17	1.18	2.6	0.238	12	60	1.025	4.05	-0.39	9	1	6	4
2	3053	6.2	1.47	0.28	67.3	-0.54	-218	111	0.9469	3.5	-0.16	10.2	-1	8	1
2	3058	3.3	1.75	0.35	2	0.059	19	552	0.9944	4.42	-1.19	9.9	0	8	1
4	3062	7.3	0.29	0.3	13	-0.309	52	312	0.9986	3.06	0.41	8.7	1	8	2
5	3063	1.4	0.27	0.58	75.6	0.036	44	476	0.9686	3.06	0.4218	8.9	0	9	3
5	3065	8.7	0.15	-0.78	-27.1	0.364	-84	456	0.9905	2.05	0.5238	17.4	1	7	3
2	3080	6.3	0.39	0.32	5.9	-0.479	352.5	260	0.9768	3.12	-0.99	10.1	-1	7	1
5	3088	7.4	0.16	0.49	1.2	0.01136	164	-72	1.011	4.23	0.4994	12.5	1	8	3
2	3093	9.4	1.045	0.35	-7	-0.296	226	95	0.9882	3.44	0.46	17.3	-1	7	1
5	3096	-14.5	-0.16	-1.24	-1.3	-0.678	13	143.2	0.9904	3.79	-0.82	15.6	1	7	3
5	3101	7.1	0.29	0.34	7.8	-0.886	49	128	1.016	4.39	0.4	10.7	1	8	4
4	3103	4.4	0.45	3.19	1.3	-0.107	152	79	0.9937	4.4	0.38	11.6	-2	7	2
5	3107	11.8	0.78	0.74	2.8	0.088	74	410	0.9928	3.51	0.93	18.4	2	8	3
5	3109	8	0.58	0.08	1.9	0.059	20	31	0.973	2.24	0.64	10.2	0	6	3
6	3111	3.9	0.38	0.36	3	0.081	119	770	0.9638	3.04	-0.42	14.7	1	9	4
4	3113	2.9	1.09	2.02	10.51	0.039	151	397	0.9906	3.08	0.38	6.5	1	7	2
5	3116	9.2	0.42	-0.78	2.209	0.04	535	172	1.042	2.98	0.67	12	1	9	3
2	3132	9.3	0.13	0.25	15.18	-0.291	262	314	1.028	3.05	0.2961	10.4	0	7	1
4	3141	6.8	0.27	0.36	7	0.043	74	207	0.9876	2.56	0.49	3.8	1	7	3
4	3153	10.4	1.65	-1.09	2.8	0.44	40.41	420	0.9962	2.51	0.49	10	0	8	2
2	3154	7.5	0.33	0.48	81.55	-0.237	55	-129	1.001	2	1.56	15	0	8	1
5	3160	6.8	0.68	1.46	1.4	-0.154	38	108	0.97	2.07	0.98	12	0	7	3
4	3167	6.5	0.3	-1.07	129.7	0.029	35	138	0.9911	2.64	0.6	5.7	1	7	3
4	3170	5.9	0.42	0	44.7	0.048	4	0	0.9543	3.71	0.74	19.5	-1	5	2
2	3173	7.6	-1.27	1.87	28.5	0.033	26	146	0.9908	2.98	0.49	14.7	-1	8	1
4	3174	-2.7	0.25	0.27	-51.2	-0.075	222	141	0.9959	1.95	0.5	9.8	0	6	2
5	3177	13.6	0.27	0.32	5.552	0.435	18	93	0.9904	3.11	2.07	12.25	1	7	3
4	3179	3.9	-0.59	-0.82	3.2	0.0072	15	126	1.033	1.82	0.51	6.7	0	10	3
2	3184	7.8	0.6	0.82	52.8	0.08	14	3	1.048	2.6	0.52	9.9	-1	9	1
2	3190	-1.1	-0.98	0.37	1.7	0.07974	31	243	0.9769	4	0.2472	11.8	0	9	1
5	3193	16.1	-1.52	1.54	2.4	-0.281	25.57	100	0.9913	3.08	0.28	11.19	0	8	3
5	3199	5.8	0.26	0.3	9.3	0.172	35	531	0.9958	4.31	-1.21	10.55	0	8	3
4	3201	8.1	-0.71	-0.87	15.1	0.081	12	125.2	0.8968	3.53	0.23	9.6	0	9	2
2	3202	5	0.24	0.48	-39.2	0.039	48	236	1.013	3.69	0.62	13.3	-1	5	1
2	3203	9.1	1.51	0.24	17.6	0.113	279	117	0.9928	3.16	0.05	13.4	1	8	1
4	3206	13.9	0.27	0.6	-54.2	-0.81	36	129.4	0.9705	2.26	0.55	11	-1	8	2
4	3209	6	1.72	-1.14	-27.7	-0.399	36	174	1.036	3.14	0.5	9	-1	7	2
2	3210	12	0.6	0.08	2.6	0.592	3	-237	1.032	1.99	-0.05	7.8	0	9	1
5	3217	12.9	-0.84	0.43	43.6	0.057	32	181	0.986	3.41	0.51	10.5	0	7	3
5	3220	12.5	1.21	1.77	-52.9	0.593	47	-94	1.045	4.32	0.3843	13.4	0	7	3
2	3228	5.9	1.36	0.28	1.9	-1.083	34.52	78	0.9918	2.52	-0.47	12.91	-1	6	1
2	3232	27.9	-0.3	-0.69	-12.1	-0.102	-199	276	1.027	3.1	0.76	10.27	0	7	1
2	3239	-12	0.635	-1.59	1.8	0.97	183	218	0.9732	2.39	0.4139	9.3	0	10	1
4	3243	7.2	0.5	-1.04	0.8	0.555	132	-52	0.9932	4.7	-0.48	14.3	0	8	2
2	3245	3	-0.26	0.52	47.1	0.219	312	382	0.9755	3.08	0.56	8.7	0	8	1
4	3246	11.8	0.24	0.33	21.1	0.613	45	101	1.018	3.8	0.6313	11.7	1	9	2
5	3251	7.3	-0.18	0.41	14.6	0.048	73	223	0.9986	4.01	0.71	9.4	0	8	4
5	3253	6.2	1.02	-0.01	2.57	0.417	39	-224	0.9931	2.66	1.91	10.8	0	7	4
5	3257	7.9	0.29	0.16	-31.8	-0.507	-23	177	0.9971	3.13	0.3351	10.6	0	10	3
4	3260	10.7	-0.12	-0.68	-46.95	0.456	-50	276	1.019	1.83	0.32	8	0	9	2
2	3261	0.4	0.22	2.13	26.9	0.042	301	168	1.02	2.47	0.36	20.5	1	7	1
5	3263	6.6	1.06	-0.36	-3.3	0.042	249	101	0.9919	4.08	0.41	10.5	1	7	3
4	3278	14	0.17	0.76	-47.5	-0.213	-77	122	0.9011	2.26	0.52	8.5	0	7	2
2	3281	6.4	-1.645	-1.07	3.3	-0.208	-338	547	0.9948	3.42	-0.35	13.7	0	6	1
5	3283	7.1	0.38	0.71	3.5	-0.031	38	-489	0.9887	4.18	0.47	12.2	1	7	3
2	3290	3.5	-0.43	0.49	1.3	1.176	27	372	0.9936	2.49	-1.01	10.2	-1	9	1
4	3297	9	1.48	1.84	23.8	-0.287	20	-256	1.026	3.16	-0.04	7.1	0	8	2
5	3304	12.5	0.4	1.08	2.1	0.339	15	230	0.998	2.2	0.81	9.7	0	12	3
4	3305	14	0.42	0.27	2	0.142	252	55	1.034	3.78	0.64	12.3	-1	6	2
4	3307	7.5	1.46	1.64	5.8	0.564	23	401	1.031	3.18	0.59	10.5	2	8	2
2	3308	7.3	0.42	-1.35	2.7	0.084	-219	-250	0.9805	3.21	-0.73	6.5	1	8	1
2	3313	19.3	0.52	1.7	2.3	-0.338	8	38	0.9853	4.6	0.61	10.01	1	8	1
2	3314	10.4	-1.16	0.14	51.4	0.06	12	113	0.9934	3.32	0.34	5	0	7	1
5	3317	7.5	2.34	2.11	125.5	-0.363	31	159	0.9656	4.56	0.44	7.8	2	9	3
5	3348	8	-0.81	-0.89	2	0.108	133	-341	0.9973	3.22	0.61	10	1	9	3
4	3350	-2.9	0.05	0.32	4.6	0.041	-220	370	0.9918	3.04	0.03	13.7	-1	9	1
4	3359	4.9	-1.365	0.34	1	0.068	32	143	0.9						

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	3456	17.4	0.85	0.33	1.9	0.857	37	190	0.9895	3.26	0.58	9.7	-1	6	2
5	3464	7	0.29	-0.54	1.6	-0.882	-182	-235	1.021	3.26	0.47	13.6	1	8	4
2	3470	-1.1	1.08	0.02	-61.2	0.049	-273	-26	1.061	3.05	0.63	9.95	0	7	1
4	3475	7.7	0.28	0.33	2.4	0.053	-25	175	0.992	3.2	-2.43	7.9	0	8	2
5	3477	7.2	-0.13	-1.28	43.9	-0.504	80	190.3	0.9619	3.13	-0.21	25.2	-1	8	3
2	3490	18.6	1.59	-0.76	-57.1	-1.124	34	299	0.9964	3.36	0.5262	10	0	8	1
4	3493	11.2	-1.22	-1.07	2.4	0.042	30	382	0.994	3.43	0.61	10.5	0	8	2
4	3502	6.8	0.22	-1.27	10.6	0.07	161	188	0.9965	2.87	0.5746	6	-1	7	2
5	3508	6.6	0.26	3.21	-54	0.08365	18	21	1.013	1.84	-0.98	7.5	0	7	3
2	3516	28.1	0.18	0.81	-39.4	0.06538	17	149	1.046	3	-0.14	15.8	-1	7	1
5	3517	8.9	0.205	0.13	3.45	0.1162	41	152	1.037	3.97	0.52	13.8	1	10	3
2	3525	-1.3	-2.12	-0.88	-4.1	0.066	80.31	207	0.9837	2.91	0.52	9.8	0	7	1
4	3532	28.6	0.655	0.88	92.5	0.511	15	113	0.9862	3.17	-0.92	9.8	0	9	2
4	3535	-0.9	0.56	3.15	3.1	0.428	28	157	0.994	3.13	0.5055	12.1	0	7	2
4	3536	13.5	0.39	0.2	1.2	0.041	35	532	0.9922	1.99	-1.32	11	1	7	2
4	3540	6.8	1.09	-1.06	-12.5	0.404	225	172	0.9774	3.29	0.55	11.6	-1	7	2
2	3547	-5.7	0.21	0.26	-35.4	0.061	-34	198	0.9992	3.11	1.59	9.286	0	7	1
5	3550	7.1	-0.1	0.41	3.1	0.018	15	37	0.99	3.02	0.86	11.9	-1	8	3
2	3557	7.1	-0.99	-0.35	59.6	0.215	-213	-68	1.028	3.88	0.5575	11.1	-1	8	1
2	3562	13.8	-0.16	0.17	31.9	0.065	236	24	1.007	4.49	0.68	11.05	-1	8	1
4	3563	7.7	0.28	0.29	4.3	-0.192	190	392	0.9939	2.06	1.31	10.2	-1	8	2
2	3564	2.2	0.55	-0.04	-8.3	0.323	306	201	0.9925	2.38	1.93	11.4	-1	8	1
2	3570	6	-0.65	0.05	-24.5	0.066	344	17	1.032	3.52	1.04	4.3	1	7	1
2	3573	8.5	1.48	0.74	-22.9	0.1268	603	-180	0.9928	3.39	0.6407	11.2	1	9	1
2	3577	8.7	-0.43	0.42	-14.4	0.053	27	114	0.9712	4.16	-0.14	10	1	9	1
5	3579	7	0.44	-0.08	-25.6	-0.917	-68	-78	1.026	3.13	0.4343	9.8	-1	8	3
1	3581	13.5	0.49	-0.07	2.6	0.068	4	53	0.9513	3.3	0.47	-3	-1	8	1
4	3587	6.9	0.87	0.79	-110	0.402	-338	78	0.9898	3.12	0.31	12.5	0	8	2
5	3602	6	0.58	1.96	-8.9	-0.126	29	200	0.9912	1.86	0.71	12.3	-1	7	3
4	3609	5.6	-0.25	1.66	-23.7	0.022	163	-134	1.043	3.29	1.06	12.2	0	9	2
4	3612	0.5	0.57	1.62	2	0.104	471	953	0.9963	2.09	1.26	10.1	1	11	2
2	3621	7.4	1.34	1.71	3.7	0.399	544	73	0.9915	3.06	0.45	11.4	1	8	1
4	3642	0	1.47	-1.04	3.8	-0.201	57.12	180.8	0.992	3.05	-1.22	11.2	1	6	2
2	3647	2.3	0.32	0.14	45.2	0.21	83	180	0.9961	1.89	0.47	8.8	0	8	1
2	3649	6.4	0.24	1.09	5.8	0.621	21.23	120	0.9942	2.82	0.98	10.5	0	7	1
2	3654	2.6	0.29	-0.38	2.2	0.05	216	-344	1.003	3.47	0.6598	10.3	0	10	1
4	3660	6.6	0.24	-0.4	15.8	0.035	326	110	1.038	3.24	-0.47	9.726	1	7	2
5	3665	5.9	1.18	0.79	2.4	0.03	-175	-245	1.032	4.45	0.4432	19.6	0	6	3
4	3669	12.7	1.23	-0.15	9.5	-0.56	15	130	1.094	3.1	0.44	7.6	0	8	2
4	3673	8.2	0.37	0.25	-55.5	-0.286	196	84	0.9909	3.85	0.28	11.7	0	7	2
4	3675	16	0.5	1.34	4.1	0.036	193	131	0.9902	3.7	-0.87	6.3	0	7	2
4	3678	-7.9	0.21	-2.25	19.9	0.057	168	327	0.9774	3.89	0.59	12.3	0	8	2
2	3680	6.2	-0.37	-1.39	2.2	-0.673	19	-96	0.9946	2.91	0.9	9.4	1	7	1
5	3686	7.6	0.08	-0.47	-33.1	-0.026	7	70	0.9966	3.36	0.99	9.4	2	9	3
4	3693	5.9	-0.29	0.23	36.1	0.035	20	-297	0.9768	3.14	1.37	16	1	7	2
2	3710	-0.4	0.22	-0.44	-100.4	0.222	29	93	0.9927	4.07	1.66	8.3	0	8	1
5	3713	8.6	0.45	0.5	44.9	-0.381	24	31	0.9886	2.94	0.38	13.4	0	8	3
5	3718	-8.5	0.22	0.33	2	-0.272	-30	126	0.9546	3.313	0.55	11.4	1	8	3
4	3725	9.5	0.32	1.19	2.7	0.018	109	516	0.9907	3.67	2.5	11.7	-1	6	2
2	3726	7.7	0.39	0.34	4.7	0.056	331	119	0.9787	3.12	1.57	10.2	1	8	1
2	3747	13.9	0.23	0.84	24.4	0.037	181	141	1.047	3.09	0.32	13.7	0	10	1
4	3753	0.1	0.31	0.36	4.8	-0.535	245	142	0.9925	3.01	-0.6	15	0	9	2
5	3754	5.8	0.34	0.37	1.8	0.383	70	170	0.9903	3.38	1.59	11.8	0	6	4
5	3760	-8.1	-1.02	0.25	59.8	-1.125	21	124	0.9936	3.06	0.38	9.9	0	7	4
2	3763	6.1	1.32	0.3	1.2	-0.422	36	-81	0.991	4.24	0.56	16.8	1	7	1
5	3765	7.2	0.58	0.27	5.8	0.032	40	-88	1.011	3.17	0.53	12.8	0	8	3
5	3769	17	0.2	1.27	1.4	0.045	21	318	0.9836	3.257	0.46	10	0	8	4
4	3771	7.1	0.28	-0.56	37.2	0.84	48	184	1.041	3.9	-0.18	9.4	0	8	2
2	3784	3.1	0.42	0.21	-102.8	0.092	33	-762	0.9982	4.19	2.21	4.9	1	9	1
3	3787	0	-0.35	0.73	4.1	0.074	27	85	0.9971	5.42	0.5865	3.7	1	8	2
4	3794	7.2	0.24	1.83	13.9	-0.496	52	106	0.9927	3.69	0.77	10.8	0	8	2
4	3796	14.7	0.26	0.4	1.1	0.042	9	60	0.9769	2.34	2.25	7.6	0	8	2
4	3798	18.5	1.1	0.24	31.6	0.484	56	171	0.9496	4.21	-0.52	9.8	1	7	2
4	3809	1.1	0.665	0.04	56.8	0.031	48	71	1.008	3.94	0.32	15.9	0	7	2
5	3812	7	-0.97	2.37	8.7	0.045	-351	222	1.029	4.13	0.54	10.7	1	7	3
2	3819	6.9	0.3	-0.63	-52.8	0.048	10	147	0.9906	3.04	0.46	11.6	-2	8	1
5	3828	6.8	0.19	-0.3	2.261	0.03074	-221	-291	0.9933	3.12	0.44	10.7	0	7	3
5	3831	6.4	0.32	0.26	131.6	-0.404	53	-36	1.017	2.49	0.5	16	1	7	3
2	3833	7.5	-0.9	0.23	27.2	0.054	28	278	1.025	3.18	-1.33	6.6	1	8	1
5	3837	6.1	0.9	-1.76	60.1	0.046	39	151	0.9984	2.87	2.04	10.6	1	7	3
2	3839	5.2	0.325	0.16	2	-0.961	13	49	0.9962	3.38	0.57	9.7	-1	9	1
4	3843	4.2	0.215	0.23	96	-0.293	83	112	0.9969	3.46	0.09	5.1	0	5	2
4	3846	12.8	0.92	1.39	4.2	0.627	-128	-141	0.989	2.81	0.5345	13.1	0	7	2
5	3854	-0.8	0.43	0.47	-18.3	0.068	171	-213	0.9665	3	0.45	10.9	1	8	3
2	3861	14.2	0.58	0.01	-35.2	-0.003	-87	18	0.9957	4.29	0.41	10.5	0	8	1
4	3864	7.7	0.23	0.08	2.5	0.428	14	46	0.9681	2.9	0.66	10.6	0	8	2
2	3868	21.4	0.26	1.37	2.6	0.384	-375	129	0.9902	3.2	0.72	11.5	0	6	1
4	3869	7	1.01	0.52	-60.3	-0.003	7	60	0.9918	3.07	0.64	6.8	1	8	3
2	3870	17.1	0.1	0.23	7.529	-0.448	-229	271	0.9192	3.92	-0.96	11.8	0	8	1
2	3883	16	-0.27	0.05	9	-0.437	136	113	0.9919	2.61	1.45	16.7	-1	7	1
2	3886	7.6	0.18	0.49	11.05	0.334	36	335	0.9966	3.06	0.33	14.5	0	8	1
4	3889	6.3	1.75	0.2	35.2	-0.506	48								

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	4020	5.6	0.19	0.87	35.3	0.033	4	261	0.969	2.97	0.4272	11.2	0	6	1
4	4022	6	0.32	0.44	33	0.557	267	189	1	5.77	-0.43	12.1	0	7	2
2	4026	8.7	0.69	0.31	-61.1	0.478	23	114	1.029	3.71	0.74	13.3	0	10	1
2	4032	2	0.47	1.31	8.9	0.18	199	172	1.016	3.22	1.46	10.56	-1	8	1
2	4043	11.8	0.42	-0.69	134.2	0.503	42	215	0.9971	3.47	2.31	4.7	-1	8	1
2	4045	10.5	1.19	0.96	8.2	0.055	162	-219	0.9954	3.23	0.48	9.5	1	7	1
5	4048	6	-1.27	1.64	9.1	-0.223	35	127	0.9933	2.97	0.3	10	1	7	3
5	4051	18.6	0.2	0.44	-50.3	-0.216	-35	130	0.9469	3.11	0.6794	10	1	8	3
4	4052	-9.8	0.15	-1.16	13.65	0.048	257	204	0.9978	3	0.6	7.1	0	8	2
4	4056	27.8	1.04	0	2.126	-0.128	34	-323	0.9976	3.62	0.68	9.6	-1	8	2
2	4059	10.6	1.025	0.43	2.8	0.618	101	-238	0.9784	3.06	1.46	6.3	0	12	1
5	4069	7.7	0.18	0.35	5.8	0.055	25.61	-184	0.9958	3.24	0.54	9.7	1	8	3
4	4074	5.9	0.37	1.01	10.9	0.033	-198	507	0.9811	3.36	0.56	12	0	7	2
2	4076	6.1	1.04	0.28	4.5	0.48	46	150	1.019	3.43	1.06	8.1	0	7	1
2	4077	-3.6	0.25	0.23	16.8	0.047	20	77	1.027	3.32	0.9614	6.3	-1	6	1
2	4079	10.6	0.94	1.75	2.3	0.05422	6	20	0.9968	3.14	0.72	17.8	0	12	1
4	4081	17.2	0.21	0.27	18.15	-0.321	91	158	0.9303	3.29	0.4409	6.8	0	7	2
4	4088	6.8	0.24	0.33	9.095	0.049	68	216	0.9932	3.1	1.91	7.7	0	7	2
2	4105	1.9	0.26	-0.25	13.6	0.05	-189	278	0.9921	2.14	0.4812	15.3	1	8	1
4	4125	-3.3	0.72	0.3	4.7	0.041	40	148	0.9932	3.16	1.6	10.2	0	7	2
4	4134	6.5	0.22	0.4	-15.3	-0.371	-19	-514	1.045	3.72	0.49	10.6	-1	7	2
2	4139	8.9	1.63	0.5	39.9	0.067	25	57	0.9956	3.24	1.36	10.48	0	10	1
2	4146	7.2	0.32	0.4	10.8	0.038	45	-173	1.027	3.2	0.83	10.63	-1	8	1
4	4149	6.8	0.48	-0.16	3.4	0.035	53.09	477	0.9706	2.39	0.47	1	0	7	3
5	4151	-0.3	2.66	0.5	2.7	0.122	4	194	1.001	4.03	0.7	19	1	12	3
2	4155	6.8	1.05	0.41	19.9	-0.01015	59	143	0.9969	3.2	0.4	11.8	0	7	1
2	4157	9	0.26	0.34	6.7	0.029	311	-47	0.995	2.71	0.5	10	1	10	1
5	4168	6.5	0.37	0.38	71.6	0.027	65	237	0.9893	3.24	0.6434	10.1	1	7	3
2	4170	8.7	1.165	0.49	13	-0.305	44	214	0.9684	3.71	0.5	9.7	-1	8	1
2	4174	5.5	0.66	0.22	67.9	-0.22	10	-112	1.028	3.46	0.44	5.9	-1	6	1
5	4179	6	0.27	-0.92	3.6	0.035	167	133	0.9921	3.6	1.76	10.8	1	7	3
4	4185	16.2	-0.85	0.77	14.2	-0.726	-163	212.5	0.999	3.14	3.73	3.6	0	8	3
2	4199	10.3	-2.52	0.47	1.3	0.039	241	123	0.9959	2.9	0.64	3.1	-1	10	1
5	4205	6.4	0.69	-0.53	-58.35	0.055	7	12	0.9916	3.47	0.53	12.9	0	7	3
2	4208	-0.3	-0.37	1.32	20.15	0.06	30	22	0.9732	1.32	0.2941	10	1	8	1
4	4211	6.5	1.43	0.25	-27.1	0.238	15	110	1.019	3.15	0.42	9.2	-2	7	2
2	4212	11.6	0.41	0.54	39.7	0.057	22	-2	0.9601	3.32	0.76	6.9	-1	13	1
2	4215	2.9	0.21	-1.29	7.319	0.047	60	189	1.003	2.84	0.98	10.1	0	6	1
4	4217	-13.9	0.33	0.3	29.7	0.03464	35	147	1.013	3.24	0.56	13.4	-1	7	2
5	4219	6.7	0.17	-0.09	-36.5	0.032	39	423	0.9934	2.73	0.52	10.5	0	7	3
5	4226	8.9	0.66	1.04	5	0.04	18	-374	1.017	3.06	0.48	10.6	0	8	3
4	4227	6.5	0.18	0.41	14.2	0.039	17.71	129	0.8947	3.28	0.4445	10.3	-1	7	2
2	4229	7.7	0.91	0.45	-42.7	-0.505	52	205	1.017	2.62	-2.93	11.3	-1	7	1
2	4231	14.3	1.24	0.58	-60.1	-0.075	160	238	0.9978	4.06	-0.79	11	0	11	1
3	4233	6	0.26	2.05	2.2	0.048	-155	171	0.8898	2.52	0.61	4.2	-1	7	2
2	4237	0.2	0.41	-0.54	34.9	0.597	19	-710	1.012	3.25	0.881	10.4	0	8	1
4	4243	13	0.26	-0.61	4.6	0.027	29	92	0.9909	3.15	-0.19	9.5	1	8	2
5	4248	15.7	0.31	0.34	61.8	0.037	45	463	1.01	3.95	-1.19	13.2	0	7	3
5	4255	2.2	0.9	-0.75	52.5	-0.521	33	67	0.9892	3.21	-0.17	17.9	1	7	3
2	4262	4.9	0.25	0.41	46.5	0.043	126	497	0.9682	3.15	1.46	10.2	-1	7	1
2	4266	6.8	0.67	-0.55	-50.5	0.418	302	193	0.9984	3.08	0.67	10.34	-1	8	1
5	4268	7	0.25	1.31	57.2	-0.331	25	94	1.03	4.57	1.4	9.2	1	7	4
2	4270	-2.7	-1.52	0.55	-40	0.402	55.06	85	0.953	2.93	0.315	15.4	-1	8	1
4	4273	-4.3	0.06	0.32	42.6	0.052	284	118	0.9966	3.18	0.5221	7.9	1	7	2
4	4276	16.9	-0.18	0.35	6.7	0.039	202	-33	1	1.68	0.81	15.1	1	9	2
4	4277	18.5	0.75	0.01	58.1	0.657	119	228	0.9955	3.55	2.12	12.8	0	7	2
2	4279	11.7	0.35	0.48	24.3	0.02372	-258	44	0.9953	4.21	0.2	13	-1	8	1
4	4299	5.6	0.3	0.04	64.2	0.551	-36	-769	0.9906	3.28	-0.99	12.7	0	6	2
4	4313	7.8	0.15	1.18	38.4	0.518	204	93	0.9641	1.94	0.72	11.3	1	8	2
5	4322	6.2	0.36	1.24	-32.4	0.00504	56.58	-549	0.9971	3.31	0.56	9.5	0	7	3
4	4324	13	0.23	0.25	17.3	0.182	30	110	0.9983	2.82	1	9.2	0	7	2
4	4328	8.2	-0.31	1.07	-21.4	0.04	41	92	1.042	2.26	0.6	9.7	-1	9	2
2	4331	6.6	0.34	0.27	29.2	0.059	23	136	0.9957	3.59	1.14	5.4	0	7	1
2	4335	8.2	1.1	0.09	-7	-0.617	7	37	0.9969	3.32	0.55	12.2	-1	9	1
4	4337	7.4	0.26	0.31	7.35	0.034	37	485	0.9938	2.27	0.31	15	0	9	2
2	4338	6.9	0.58	1.94	43.8	0.493	121	104	0.9932	2.99	0.39	9.5	-1	8	1
2	4343	9.9	0.35	-0.53	-24.4	0.083	11	188	0.9982	3.21	0.5	10.1	-1	11	1
2	4347	11	1.7	0.3	8.4	0.051	40	250	0.9856	4.26	0.62	9.7	-2	8	1
4	4355	-5.4	1.02	-0.48	15.8	0.302	-124	167	0.9597	3.335	0.51	9.2	0	7	2
2	4357	5.3	0.85	0.29	6.992	0.423	-2.07	55	0.9908	2.91	0.32	14.8	0	9	1
6	4359	6.6	0.44	-0.53	7.5	-0.491	13	152	1.073	3.1	0.63	18.9	1	7	4
2	4362	-7.8	0.26	3.06	10.65	0.06427	-166	405	0.9924	3.31	1.43	9.8	-2	7	1
2	4368	7.3	-0.4	0.4	16.9	0.046	45	518	0.9958	3.23	0.92	13.7	-1	7	1
5	4374	2.9	1.46	0.37	32.9	-0.422	42.06	138.8	0.9896	3.307	0.5062	12.4	1	7	3
5	4375	2.5	-0.37	0.55	9.933	0.053	303	335	0.9742	2.93	0.44	10.38	1	8	3
4	4378	7	0.61	0.51	1.7	0.051	-370	473	0.9946	3.24	1.04	4.4	0	8	2
4	4381	5.9	0.18	1.91	-51.6	-0.272	119	-260	0.9916	2.43	0.38	12.66	0	6	2
4	4387	14.5	0.31	0.42	6.9	0.671	50	481	0.9955	3.1	0.46	9	1	8	2
2	4400	5	0.22	-1.33	7.09	-0.097	-73	185	0.9933	3.03	0.41	14.9	-1	9	1
4	4423	2.6	0.54	0.28	7.5	0.077	11	-145	0.9978	2.46	0.61	10	1	9	2
2	4424	-0.3	0.31	3.14	44.1	0.1322	15	87	0.9915	3.11	-1.14	13	0	8	1
5	4428	6.9	0.82	0.52	5	-0.19									

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	4551	6.2	0.21	0.26	9.25	0.539	-455	311	0.9945	3.05	0.37	11.4	0	9	1
4	4554	8.6	0.22	1.01	12.05	0.058	18	125	1.011	4.3	-0.35	9.4	0	7	2
2	4555	7.1	-0.5	0.67	2	0.598	152	128	0.9917	3.19	-1.21	15.8	-2	8	1
4	4564	1.9	2.765	-1.29	-2	0.502	6	172	0.9911	3.4	0.59	17	0	8	2
2	4572	7	2.09	0.08	-12.8	-0.249	10	123.7	0.9686	2.52	0.47	10	-1	8	1
5	4573	26.3	0.31	-1.33	-62.3	0.545	-60	182	0.998	2.95	0.39	13.4	2	9	4
2	4577	6.9	0.34	-0.92	-54.8	-0.32	19	149	0.9925	3.54	1.88	10.8	-1	7	1
5	4579	15.2	0.64	1.11	-28.3	0.44	57	163.1	0.9448	3.16	1.76	11.3	1	5	3
4	4583	8.1	0.2	0.28	23.5	-0.0072	-180	31	0.9906	3.25	0.36	5.7	0	9	2
5	4584	6.3	0.23	0.87	26.8	0.427	-105	482	1.037	4.36	1.95	11.4	1	7	4
4	4596	-4.5	0.325	0.49	60.9	0.049	53	217	0.996	3.16	0.4	9.008	-1	7	2
4	4599	5.7	0.1	0.34	26.3	0.135	251	100	0.9969	3.27	0.46	9.5	0	6	2
4	4607	6.2	0.35	-1.24	18.1	0.069	33	158	0.9603	4.34	0.5	8.8	0	7	2
2	4609	11.7	1.2	1.74	-21.7	0.09	20	47	0.9973	3.34	0.64	12.8	-1	12	1
4	4610	7.2	0.16	0.74	12.5	-0.268	47	161	0.9981	3.04	0.44	8.7	0	8	2
2	4616	13.3	-1.17	-0.29	18.15	0.785	41	91	0.8993	3.3	0.76	8.7	-2	7	1
2	4617	17.6	0.425	1.49	13.1	-0.459	-163	241	1.041	3.88	-0.16	2.9	0	7	1
5	4633	0.2	1.54	1.25	12.4	0.114	234	155	0.9032	3.33	0.48	13.7	0	7	3
4	4638	7.8	0.25	0.41	3.7	0.042	-89	371	0.9954	3.36	0.3764	8	0	8	2
2	4641	6.9	-0.62	0.89	70.35	0.003	257	189	0.9978	2.8	0.565	11.7	0	8	1
5	4653	7.3	1.1	0.42	54.4	-0.388	288	325	0.9996	3.29	1.57	10.26	2	8	4
5	4655	6.7	1.05	0.39	70.1	-0.023	64	40	0.9956	3.89	0.38	9.4	0	7	3
4	4659	7.9	-0.66	-1.52	2.3	0.474	63	86	0.9298	3.53	0.57	14.9	1	8	2
2	4669	15.5	-0.25	0.56	2	0.056	20	124	0.9948	3.6	0.49	4	-1	8	1
2	4678	7	0.69	0.07	19	0.091	15	-125	0.9957	3.38	-1.1	4.9	0	8	1
4	4685	7	0.6	-1.12	-27.8	0.447	28	160	0.9954	2.49	0.46	9.8	1	8	2
4	4686	8.2	0.23	-2.78	1.3	0.08236	267	-220	0.9914	2.99	0.36	9	0	9	2
2	4691	30.4	0.2	0.37	16.95	0.048	-220	190	0.9995	3.7	0.42	6.7	-1	8	1
4	4695	-1.4	0.4	1.73	13.65	-0.224	47	140	0.942	4.53	0.51	10.2	1	7	2
4	4698	7.3	0.19	-0.38	124.8	0.057	617	51	0.9981	2.94	-1.63	6.7	0	8	2
5	4700	5.7	1.25	0.28	4.7	0.027	-221	-71	0.9895	3.33	0.45	12.5	0	6	4
4	4711	5.5	-0.2	0.09	40.5	0.15	18	370	1.004	4.2	0.51	5	-1	6	2
4	4722	-0.9	0.22	0.44	61.7	0.08778	-105	422	0.9459	3.45	1.46	6	0	8	3
5	4727	6.4	-0.13	1.15	-45.3	-0.59	31	-113	1.032	3.54	0.51	10.3	-1	7	3
6	4756	6.5	0.33	-0.49	-27.9	0.036	110	88	1.011	3.25	0.69	15	1	7	4
4	4762	7.1	-0.16	0.38	-29.3	0.043	34	337	1.014	3.23	0.38	8.5	0	10	2
4	4763	27.1	3.18	0.78	6.4	0.094	38.36	200	0.998	3.19	-0.61	11.2	-1	7	2
5	4766	8.2	0.79	0.51	-37.7	0.073	16	47	0.9959	3.4	1.61	11.3	0	9	4
2	4770	0.4	1.93	1.03	1.9	-0.509	86	38	0.9952	2.91	0.85	9.8	0	9	1
5	4784	6.1	-0.89	0.24	1.5	0.511	38	124	1.005	3.94	0.42	12.4	-1	7	3
2	4791	7.7	-1.04	0.3	24.4	0.407	25	-197	0.9951	2.97	0.47	10.9	1	8	1
5	4795	6.5	1.08	0.24	-8.35	-0.112	25	131	0.9957	1.96	0.51	8.4	1	7	3
2	4799	7.2	0.21	-1.24	14.5	-0.275	306	311	0.9982	3.05	-0.22	8.9	-1	8	1
5	4802	-2.6	0.23	0.29	1.6	0.043	24	415	1.035	3.12	0.9	10.4	0	8	3
4	4805	6.8	0.52	0.74	68	0.088	23	185	0.9928	4.39	-0.39	12.2	0	8	2
4	4814	6.2	1.4	0.61	1	0.031	22	349	1.018	3.24	-0.27	17.3	1	7	2
2	4816	8	0.67	-2.17	10.06	0.1	5	369	1.016	3.37	-0.91	13.8	0	9	1
4	4817	6.9	0.07	0.38	8.1	-0.143	44	295	0.9958	3.26	0.49	9.8	0	7	2
2	4822	-0.4	0.235	1.84	11.75	0.03	-198	118	1.029	3.04	0.9	9.4	0	6	1
2	4827	6.8	0.14	0.35	1.5	0.24	233	-159	0.9911	1.93	-0.06	6.6	-1	7	1
5	4833	6.3	0.25	0.3	-22.4	-0.014	-138	122	0.994	3.263	0.61	-0.2	0	8	4
4	4836	10.6	0.705	0.72	35.3	0.417	-10	-287	0.9964	3	1.59	9.5	1	8	2
2	4842	-2.6	0.12	1.21	0.1	0.398	27	118.7	1.041	3.29	0.41	13.5	0	7	1
2	4844	7	0.13	-0.78	1.749	0.056	39.45	319	1.007	4.73	-0.68	4.2	0	7	1
2	4845	1.2	0.7	0.29	5	0.028	-145	461	0.9908	2.39	0.88	15.3	-1	6	1
4	4849	7.6	-0.91	-0.76	-48.8	0.04	545	-322	0.9916	3.16	1.15	4.3	0	8	3
2	4850	6.5	0.93	0.33	29.3	0.042	50	-58	0.997	2.48	-0.75	10.4	0	7	1
5	4860	6.5	0.18	-0.7	-3.5	-0.462	43	-17	1.028	3.32	0.59	17.8	0	7	3
2	4863	8.9	0.57	0.26	-55.8	-0.081	-55	89	0.9959	2.27	-0.37	9.472	0	9	1
4	4871	6.2	-0.74	0.29	-17.3	0.047	45	220	0.9697	3.35	2.22	10	0	7	2
4	4878	7.8	0.645	1.41	5.5	0.086	6	30	0.9808	2.54	0.94	7	0	8	2
1	4881	-2.6	0.69	0.98	40.4	0.629	29	142	1.009	4.19	0.33	-2.1	0	7	1
2	4888	14.9	-0.16	1.53	-49.4	-0.514	261	63.66	0.9944	3.17	0.33	10.2	2	8	1
5	4900	8.6	0.23	-0.03	19.7	0.302	17	48	1.043	4.43	0.53	9.7	2	9	4
2	4906	-2.2	0.3	-0.95	-48.5	-1.065	49	159	0.9712	3.11	0.48	4.2	1	7	1
5	4909	13.1	0.2	0.24	66.8	-0.07	49.23	-78	1.009	4	0.33	11	1	7	3
4	4916	1.4	0.2	0.32	1.6	0.11	174	-578	1.014	3.37	-0.58	13.2	1	8	2
5	4918	7.9	1.29	1.85	-45.25	0.033	-231	100	0.9912	0.96	0.52	7.7	1	9	4
2	4926	6.9	0.23	1.48	15.5	0.001	58.83	146	0.9944	2.94	-0.66	9.7	0	7	1
2	4928	0.8	0.66	1.86	-34.5	0.08657	-443	-242	0.9946	3.38	1.8	1.3	-1	7	1
2	4941	8.7	0.23	3.35	13.4	0.044	35	-111	0.9998	3.34	0.47	8.8	0	9	1
5	4946	10.5	-1.04	0.49	-54.7	0.115	297	118	0.9835	3.34	1.3	13.1	0	6	3
2	4949	6.8	0.26	1.4	18	-0.032	38	64	0.9939	3.42	1.2	10	0	7	1
2	4956	0.7	-0.09	-0.61	1.8	0.055	-87	110	0.9796	2.12	0.44	6.2	0	8	1
5	4966	7.4	0.27	1.08	27.4	0.415	25	324	1.005	2.97	0.51	11.9	0	8	3
2	4969	9.9	-0.47	0.37	7.9	0.025	110	-207	1.032	2.93	0.37	19.4	0	9	1
4	4973	6.3	0.34	-2.77	6.2	-0.208	81	227	0.9505	3.29	0.44	9.9	0	7	2
5	4978	-0.5	0.81	0.36	67.2	0.909	262	124	0.997	1.58	0.59	13.7	1	8	3
4	4982	5.4	0.37	0.76	4.2	-0.1	243	368	1	2.19	-0.36	11.8	0	13	2
4	4985	13.7	0.26	-1.37	18.7	0.034	39	134	0.9949	3.33	0.03	7.3	1	7	2
2	4991	-4.7	0.305	0.9	1.75	0.173	17	-723	1.006	2.22	1.63	17.23	1	6	1
4	4998	4.7	1.34	0.36	14.6	0.048	35	-419	0.9968	3.14</					

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	5112	7.8	0.15	0.92	1.4	0.056	21	-705	0.9692	2.49	0.53	10.4	1	8	3
2	5117	9.6	-0.36	0.38	3.99	0.061	212	33	0.981	3.73	0.58	17.8	0	9	1
4	5127	8.1	1.63	1.46	45.3	0.596	20.44	364	0.997	3.85	2.54	9.8	0	9	2
2	5130	-4.6	0.24	-0.32	10.2	0.036	286	351	0.991	2.71	0.44	5.25	-1	7	1
2	5131	4.1	0.68	1.51	2.2	0.095	21	471	1.043	3.25	1.69	9.2	-1	9	1
3	5132	2.3	0.23	-2.21	-48.1	-0.351	-210	186	0.9991	3.22	0.4897	4.2	0	8	2
4	5135	-3.7	-0.61	1.42	-8.2	0.038	15	-165	0.9602	4.11	0.75	6.6	0	7	2
2	5136	4.3	-0.71	1.5	0.5	0.036	34	125.2	0.9952	1.93	0.39	5.7	0	8	1
4	5147	5.7	0.77	0.14	6.3	-0.471	35	182	1.039	3.11	-1.08	9.25	1	6	2
4	5157	-7.1	-0.06	0.42	7.005	0.044	66	196	0.9956	3.98	0.48	7.1	0	7	2
2	5160	6.8	1.15	-0.12	-125.2	-0.201	13	74	0.9958	4.2	0	9.523	-1	8	1
4	5165	6.4	1.57	0.2	6.6	0.054	10	94	1.002	2.43	0.69	14.8	-1	8	2
5	5166	7.3	-0.03	0.31	-57.7	0.04	39	302	1.033	3.19	0.51	11.4	0	8	3
2	5172	6.6	-0.19	2.56	10.6	0.17	151	201	1.094	2.96	0.38	9.819	-1	7	1
2	5173	13.5	0.28	0.35	1.6	0.082	36	114	0.9668	3.56	0.5	5.5	-1	6	1
2	5179	8.1	-0.04	0.02	1.7	0.0716	16	56	0.9968	3.9	0.03	9.3	0	9	1
5	5184	6.8	0.32	0.28	-40.6	-0.544	-203	100	1.002	3.08	0.47	12.4	1	7	3
2	5187	6.9	0.56	0.26	-27.6	0.06	-213	193	0.9969	1.73	0.4744	3.2	-1	8	1
2	5191	16.6	0.19	0.17	5.1	0.034	306	531	0.9942	2.18	-0.8	16.4	0	7	1
2	5193	3.2	0.43	1.82	-28.4	-0.617	-217	552	0.9906	5.36	0.94	12.1	-1	8	1
2	5194	-4.2	1.69	-0.67	25.1	-0.44	-191	340	0.9941	3.15	0.49	13.7	0	7	1
2	5199	1.3	0.25	0.39	-45.65	-1.093	23.4	155	1.006	3.92	0.0835	9	-1	8	1
4	5212	6.9	-0.59	0.24	-23.5	0.992	-115	499	0.9899	3.26	0.58	10	0	8	2
2	5213	6.4	-0.43	0.17	-116.8	0.593	235	161	0.9955	3.02	2.1	10.2	0	7	1
4	5224	7.2	0.23	0.39	14.2	0.36	49	-113	1.012	2.98	0.48	14.4	0	8	2
5	5226	8.8	3.61	0.24	2.4	0.067	10	25	0.9969	3.19	0.59	9.5	0	10	3
5	5239	17	0.21	-0.68	2	0.344	276	138	0.9918	3.05	0.76	14.9	1	9	3
4	5252	6.2	-2.69	0.93	30.3	-	55	204	0.9974	3.16	-0.66	9.1	1	7	2
						0.04704									
2	5264	7.4	0.67	0.1	64.9	-0.97	12	48	0.9989	3.319	-0.55	9.5	0	10	1
2	5266	7.5	-0.35	-1.33	-17.2	0.2234	49	-552	0.9098	3.21	0.43	8.8	-2	6	1
5	5271	2.2	0.47	0.31	9	-0.352	39	-10	1.019	3.1	0.5	9.2	1	8	3
4	5273	-4.7	0.31	1.49	-45	0.031	281	151	0.9976	3.36	0.82	12	0	7	2
4	5276	4.4	0.32	0.39	4.3	0.38	-137	127	0.9375	3.46	0.36	12.8	-2	5	2
5	5278	6.3	-0.29	0.81	4.7	0.04	-1	-18	0.9514	3.07	0.75	10.7	0	7	3
2	5281	8.1	2.55	0.63	12.3	0.049	50	531	0.9971	2.57	0.57	10.2	-1	9	1
5	5283	4.4	0.74	0.09	2	0.067	5	10	1.072	3.97	0.57	11.8	0	9	3
5	5291	4.5	-0.115	1.44	-30.8	-0.072	6	31	0.9986	3.23	0.56	10.1	2	10	3
4	5294	17.4	-1.47	0.33	-34.4	0.046	31	123	0.9983	3.85	0.4	4.6	2	7	3
4	5296	7.1	-0.28	-0.27	52.7	-0.207	46	289	0.9675	3.92	0.59	12.5	0	8	2
5	5297	3.1	0.63	0.07	-7.3	0.09	-104	37	0.9979	3.28	0.76	13.7	0	8	3
4	5313	6.9	1.3	-0.39	7.8	0.423	11	548	0.996	3.23	0.15	8.1	0	7	2
2	5314	6.2	0.5	0.12	1.8	0.539	279	416	0.9512	3.28	0.87	9.8	0	8	1
4	5321	-2.8	1.41	0.3	44.5	0.241	60	218.4	1.019	3.7	-0.25	9.3	-1	7	2
4	5325	7.1	0.23	-1.31	3.5	0.038	344	112	0.9916	4.18	0.37	18.17	-1	8	2
4	5326	4.4	2.81	0.27	60.8	0.169	63	344	0.9985	3.66	0.43	6.6	0	7	2
5	5328	6.3	-1.04	0.37	1.5	0.024	12	76	0.9888	3.38	0.5932	12.3	-1	7	3
2	5334	6.1	0.53	1.19	-61	-0.338	24	139	0.9953	4.85	0.68	16.5	0	7	1
4	5338	5.1	0	0.42	18.05	-0.362	-201	688	1.039	4.23	1.19	13.8	1	8	2
2	5344	4.5	0.62	-0.66	43.5	0.424	11	-153	0.9964	3.15	0.66	4.5	-2	9	1
2	5348	6.8	0.57	2.12	-69	0.072	32	-210	0.9801	3.43	-0.86	9.651	-1	7	1
2	5352	16.8	1.01	0.24	2	-0.205	19	-203	0.9917	3.72	0.74	18.7	0	6	1
4	5353	6	0.18	1.77	24	0.317	40	-132	0.9695	3.88	0.62	10.8	0	6	2
4	5354	9.1	0.28	0.56	1.9	0.694	52	280	1.033	3.3	-1.55	10.78	1	9	2
2	5361	1.7	1.52	0.58	1.9	0.071	5	18	0.998	3.09	0.779	10	-1	13	1
2	5364	15.2	0.39	-0.64	11.1	0.327	-27	-67	0.9661	3.05	1.14	16.4	1	8	1
4	5365	6.2	0.3	1.27	1.1	0.032	53	-37	0.9158	2.97	0.42	11.3	0	7	2
4	5367	5.8	1.57	0.87	-45.3	0.506	195	381	0.9938	2.67	0.59	11	-2	6	2
5	5379	5.2	0.34	0.39	1.4	0.098	3	7	1.012	3.19	1.53	11.4	1	11	3
4	5382	7.1	0.12	0.84	-41.7	0.276	-489	94	1.011	4.27	0.56	17	-1	7	2
4	5386	3.6	0.27	1.46	25.75	0.042	34	171.6	1	2.96	0.5	4.6	1	8	3
4	5395	-16.3	1.34	-0.84	-26.7	-0.556	16	128	0.9747	3.34	0.58	15.9	0	6	2
4	5410	7.7	0.27	0.34	1.8	0.42	31.87	-158	0.9911	2.99	0.48	10.84	1	8	2
2	5411	6.9	0.38	0.25	9.8	0.04	28	191	0.9971	3.28	0.74	12.3	1	8	1
5	5416	-3	-0.16	0.28	56.55	1.208	-132	78	1.037	2.78	2.01	12.4	1	8	3
2	5424	12.4	-0.3	-0.25	11	0.052	53	247	0.9984	4.53	0.26	9.3	2	7	1
2	5426	7.5	0.88	1.33	6.5	0.626	53	501	1.066	3.03	0.38	10.9	0	8	1
4	5428	0	0.65	0.12	-38.9	0.303	-119	10	1.029	4.59	0.14	13.5	0	6	2
6	5430	6.4	-0.21	0.32	14.9	0.05569	36	162	0.9638	3.28	0.5	14.9	0	7	4
2	5433	-1.6	0.32	-0.13	8.25	-0.288	14	441	0.9651	2.76	0.44	11.4	0	8	1
4	5437	6.1	0.15	-0.34	40.6	0.035	-80	63	1.042	4.83	0.95	5.4	-1	8	1
2	5440	28.3	1.44	2.24	1.6	0.1385	12	195	0.9901	3.13	0.52	12.2	1	6	1
4	5442	7.2	0.35	-1.18	5.6	-0.389	12	315	1.032	2.93	2.95	4.4	1	8	3
2	5445	7.9	-0.39	0.44	51.3	-0.191	61	230	0.995	3.54	0.4	11.8	0	7	1
4	5449	6.8	-0.36	0.32	-8.8	0.08341	10	316	0.9884	2.7	0.67	8.5	0	7	2
4	5452	11.4	1.18	-1.23	-61.2	0.038	34	117	0.9573	3.36	0.59	13.9	0	7	2
2	5460	6.1	1.06	0.69	-19.8	0.196	-167	28	1.033	3.98	0.73	16.2	-1	8	1
2	5461	7.1	1.93	2.02	7.1	0.284	28	426	1.026	4.83	0.95	5.4	-1	8	1
5	5465	6.7	-0.52	0.13	1.4	-0.372	-96	195	0.9937	3.52	0.54	9.4	-1	7	1
5	5467	6.8	0.98	0.35	2.3	0.042	16	85	0.9492	3.19	0.5481	8.6	0	7	3
4	5471	7.9	-0.38	1.63	-8.6	-0.7	20	72	0.9885	3.12	1.24	10.5	1	8	2
4	5474	6.8	0.19	2.4	4.9	0.047	199	60	0.9928	5.7	0.74	11	0	7	2
4	5475	14.8</td													

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	5589	7.9	1.42	-0.18	39.35	-0.381	13	106	1.006	3.24	0.07	7.75	-1	9	1
5	5591	20.2	0.23	0.2	-43.7	0.898	-247	50	1.002	3.15	0.06	12.6	1	11	4
2	5596	7.3	-0.34	1.29	9.9	0.467	250	161	0.9937	3.51	0.28	11.2	0	8	1
5	5606	13.9	1.14	0.16	4.1	0.035	26	155	1.023	3.25	-0.84	9.3	0	8	3
4	5608	5.1	-1.15	0.25	1.6	0.601	264	115	0.9921	3.39	-0.05	10.9	1	7	2
4	5611	15.3	0.3	1.79	64.4	0.511	44	163	0.9895	2.75	1.4	15.1	-1	7	2
4	5612	7	-0.31	0.3	13.3	-0.028	46	300	0.9988	3.2	2.13	13.6	1	7	2
5	5614	6.5	0.26	0.32	-0.8	0.028	36	118	0.9908	3.27	1.97	14.9	0	7	3
4	5620	11.2	0.345	1.92	1	0.068	43	143	1.036	3.5	0.4	10.9	0	6	2
5	5623	6.2	1.115	1.22	1.9	0.036	-89	117	0.9862	3.4	0.44	18.3	1	7	3
2	5624	12.8	0.61	1.07	-38.5	0.09	-185	87	0.9952	2.9	0.23	9.7	2	10	1
5	5626	17.4	0.27	0.46	9.7	0.048	89	-133	0.9974	3.8	0.59	9.6	2	9	3
2	5633	8	0.22	-1.11	-3.7	0.044	45	163	0.9748	3.21	-1.05	3.8	-2	9	1
4	5635	20.6	0.24	1.48	9.8	-0.026	20	46	0.9974	4.19	1.39	10	-1	9	2
4	5640	6.6	1.54	-0.07	1.3	0.04259	32	472	0.9916	2.57	0.42	10.7	1	7	2
2	5643	7.6	0.36	0.48	50.4	-0.205	112	182.3	0.9866	3.04	-0.51	9.2	0	8	1
5	5644	6.8	0.31	0.3	8	0.028	-37	122	0.9916	3.13	0.52	12.6	1	7	4
5	5653	6.2	0.37	0.42	42.5	0.036	15	70	0.9665	3.25	0.48	12.7	1	7	3
5	5663	7.1	0.22	-2.36	4.906	-0.51	-181	199.9	0.9939	2.56	-0.57	8.3	0	8	3
5	5664	-0.7	0.13	0.8	-50.9	0.047	-65	134	1.08	2.22	0.97	9.8	1	8	3
2	5667	-3.6	0.16	0.29	1.8	0.122	-201	-117	0.9807	3.06	1.38	11.4	-1	7	1
2	5671	16.7	0.36	0.25	5.7	0.015	296	-15	0.9405	3.7	0.59	12.1	0	8	1
4	5673	6.6	0.38	-0.85	-33	0.061	-255	214	0.9976	4.08	0.56	7.7	0	7	2
4	5676	5.4	0.18	-1.32	-4.9	0.041	19	187	0.9728	3.42	0.4	9.4	-2	6	2
2	5678	0	0.01	0.54	2.7	0.105	5	133	0.9988	2.23	0.07	8.8	0	11	1
2	5698	7	0.18	0.34	39.3	0.125	12	136	0.9922	3.25	1.5	6.7	-1	8	1
5	5700	26	-0.36	-0.43	35.3	0.037	202	120	1.028	4.33	0.69	10.6	1	7	4
4	5705	-2.2	0.32	-1.18	42.4	0.494	-471	183	0.9723	4.51	0.43	10.9	0	7	2
4	5706	7	-1.51	1.91	38.1	0.045	-358	550	0.9418	2.99	0.4855	10.8	2	8	2
5	5711	1.8	0.27	-0.86	4.5	-	58	421	0.9896	2.92	0.31	12.6	0	6	3
5	5712	6.6	0.13	-0.06	7.1	0.058	47	-245	0.9946	3.15	1.46	8.7	1	7	3
4	5716	15.3	0.37	0.36	1	-0.138	17	30	1.031	4.22	1.92	10.84	-1	9	2
2	5719	7.3	0.19	1.27	-9.7	0.057	-136	-153	0.9981	2.94	0.41	8.8	1	8	1
2	5725	10	-0.02	1.89	-27.25	-	127	151	0.9968	3.08	0.5054	3.7	-1	8	1
6	5728	-5	0.19	-0.1	1.2	0.122	45	378	0.9476	2.11	-0.91	14.2	2	8	4
2	5734	3	-0.46	-0.6	2.8	0.084	-120	122	0.9984	4.4	0.56	9.8	-1	10	1
4	5735	-0.9	0.2	0.69	-29.1	-0.45	37	375.5	0.96	3.14	0.46	3.5	0	8	3
2	5743	6.6	-1.02	0.36	-52.3	-0.028	57	330	0.996	3.4	-2.24	9.6	-1	7	1
4	5754	-2.2	2.11	0.26	-14.4	0.038	18	97	0.9948	3.36	0.46	10.78	-1	6	2
2	5755	14.1	0.81	-0.67	-31.3	0.08502	16	-58	0.9936	3.15	0.45	10.4	0	9	1
4	5756	8	-0.42	-0.91	2.5	0.03069	40	210	0.9932	3.67	-0.75	10	1	7	2
2	5766	-3.1	-2.12	0.8	4.154	-0.158	131	167	0.9776	3.87	0.11	5	0	7	1
4	5770	2.5	0.675	0.2	1.7	0.033	-161	-356	0.99	3.34	0.48	9.8	0	6	2
2	5774	8.4	-1.685	-0.99	1.9	0.09	-240	-217	0.9965	3.19	2.2	6.3	0	9	1
2	5775	6.9	0.3	0.3	50.15	-0.199	-171	435	1	3.07	0.32	12.7	-1	8	1
4	5776	6.3	0.24	1.75	1.6	0.057	48	-63	0.9934	3.45	0.7	16	0	7	2
6	5778	5.6	1.2	-0.87	29.8	0.037	-167	-18	0.9927	3.25	0.99	16.4	1	6	4
4	5786	8.4	0.18	-0.5	-3.7	0.046	-36	31	0.9953	3.03	2.16	9.3	-1	8	2
4	5787	9	0.51	0.78	33.2	0.099	-152	795	0.9986	4.32	1.5	10.4	0	8	2
4	5791	6.9	0.51	0.23	-22.6	0.072	13	22	1.016	3.4	-0.07	3.9	1	8	3
4	5794	5.8	0.15	-1.04	-59.1	0.037	301	119	0.9653	3.68	0.4444	10.2	-1	6	2
1	5803	8.8	-0.98	0.19	12.5	0.034	38	115	1.044	2.24	0.43	-1.6	0	6	1
2	5804	0.2	0.28	0.27	10.3	0.025	26	108	0.9555	3.2	0.4529	10.7	1	7	1
5	5808	7.9	0.29	0.39	-22.6	0.442	6	117	1.056	2.87	0.42	10.7	1	9	3
4	5810	6.9	0.19	0.49	6.6	0.036	49	269	0.9932	3.38	1.06	17.4	0	8	2
4	5813	3.3	-0.83	0.27	-44.2	0.029	20	117	0.9905	3.21	1.48	15.9	0	8	2
4	5828	-3.1	-0.04	0.89	30.3	0.05	20	72	0.9715	3.43	-0.24	10.8	-1	6	2
5	5839	-1.5	0.16	0.24	70.2	0.009	180	361	1.026	4.72	2.03	10.3	1	7	4
5	5842	3	1.37	1.2	7.8	0.14	14	130	0.9615	4.02	0.45	10.27	0	8	3
4	5843	11	1.66	-1.01	2	0.343	-259	18	0.9979	3.78	2.35	10.5	-1	12	2
4	5844	18.1	2.41	-0.07	4.7	-0.168	34	-108	0.9927	3.63	0.38	13.6	0	7	2
2	5847	9.2	0.23	0.42	74.5	0.042	-201	-239	0.9692	3.67	1.34	10	0	8	1
2	5851	5.7	1.42	0.25	18.4	-0.158	-234	182	0.9995	3.13	0.62	9.3	-1	7	1
4	5854	-6.4	-1.28	-0.56	-47.4	-	66.76	93	0.9946	3.4	0.4832	5.6	-1	7	3
2	5857	6.5	0.23	1.87	37.1	0.621	-5	112	1.006	4.31	0.54	3.2	0	7	1
4	5866	5.5	-0.21	0.25	24.2	0.265	198	118	0.9823	4.8	0.67	12.5	-2	6	2
2	5874	6.3	0.48	1.72	-22.9	0.06	-212	156	1.031	3.79	0.5425	9.4	0	7	1
4	5886	19.2	0.31	0.3	0.9	0.0185	16	209	0.9634	2.83	0.7022	5.3	0	9	2
2	5895	-2.5	0.33	0.49	2.6	0.13	27	294	0.9666	2.44	0.75	14.2	0	13	1
2	5897	9.9	0.2	0.22	1.3	0.194	25	503	0.993	4.21	0.43	10.98	-1	6	1
2	5898	7.2	0.62	0.06	2.7	0.146	237	85	0.9727	3.51	0.23	6.3	0	8	1
2	5900	5.6	-1.14	0.26	5.7	0.642	12	-203	1.024	2.48	1.26	11.1	1	6	1
2	5902	12.4	-0.32	0.07	6.236	0.1	20	57	0.996	2.53	-1.43	11.7	1	8	1
2	5908	15.6	2.38	0.41	5.9	-0.408	-244	13	1.043	3.135	1.25	11.6	0	10	1
2	5909	16.7	-0.99	0.22	31.1	0.377	1	505	1.017	1.42	0.32	11.4	0	6	1
6	5912	6.9	0.2	0.37	59.7	0.027	24	495	0.9659	3.38	1.14	17.9	1	7	4
4	5913	8.4	-0.06	0.49	6.385	0.036	-107	-15	1.038	3.2	0.27	5.8	0	8	2
5	5917	6.8	0.34	0.36	47.9	0.029	261	128	0.9932	3.26	0.35	11.95	0	8	4
2	5918	6.7	0.49	0.28	10.2	-0.318	161	115	1.031	2.68	0.86	14.6	0	7	1
5	5921	8.6	1.49	0.42	-20.4	0.307	35	89	1.006	1.02	0.6346	15.1	-1	9	3
2	5931	-3.8	0.2	0.34	55	-0.503	-37	132	0.9899	1.95	0.42	11.7	-2	6	1
4	5942	15.1	0.28	0.24	3.6	0.04	50	572	0.9874	2.4	-2				

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	6063	10.1	0.07	0.3	35.3	0.047	17	236	0.9571	3.22	0.71	1.9	1	9	1
5	6064	16.5	1.63	1.78	20.8	0.035	-39	184	1.049	3.7	1.09	9.005	1	7	3
5	6068	-0.5	-0.56	1.53	2.8	0.382	40	-57	0.9916	2.96	0.63	15.9	0	7	3
2	6069	11.1	-0.035	-0.12	2.1	0.649	-251	25	0.9961	3.5	1.24	9.7	0	8	1
4	6070	-2.2	0.3	-0.91	-0.3	-0.508	46	165	1.007	0.6	0.4	8.7	0	8	2
5	6071	-4	-0.55	0.7	3.95	-0.35	56	142	0.983	2.46	0.65	10.6	1	7	3
5	6074	3.3	0.21	1.12	-43.05	0.042	41	67	0.9997	3.28	0.5593	9.8	0	7	3
4	6079	13.9	0.2	0.38	22.5	0.948	416	-339	0.9781	3.15	0.37	5.1	0	8	2
2	6082	6.9	0.86	-0.61	-1.691	0.036	97	121	0.9926	3.42	0.4749	10.8	0	7	1
5	6088	13.2	-0.12	0.08	34	0.266	248	164	0.9938	3.56	1.42	10.82	0	7	3
2	6094	7.7	1.62	0.36	25.4	-0.119	266	46	0.9971	3.24	2.41	8.1	0	8	1
4	6095	4	0.46	0	1.9	0.587	25	-227	1.007	3.5	1.89	14.7	0	6	2
2	6098	7.6	0.21	0.6	-102.8	0.046	151	165	0.9936	5.36	0.24	4.1	0	8	1
4	6102	11.8	0.24	0.33	12.3	0.046	31	145	0.9983	2.88	0.5769	9.5	0	7	2
2	6105	14.1	0.26	0.13	4.5	-0.891	-208	116	0.9118	3.42	0.9	13.7	0	6	1
5	6113	3.4	0.22	0.56	-26.4	0.545	-205	97.44	0.9759	3.23	2.08	9.5	1	11	4
2	6116	12.1	-0.46	1.07	2.6	-0.043	26	-174	0.9217	4.07	0.85	15.6	0	8	1
2	6120	5	0.47	0.4	31.5	-0.348	-223	315	1.001	3.32	0.47	11.46	0	6	1
2	6121	11.7	0.32	1.91	7.9	-0.424	53	-114	1.037	3.14	0.5	9.57	-1	7	1
4	6126	8.7	0.23	1.89	-56.6	0.054	136	-103	0.9924	3.6	-0.02	10.8	-2	7	2
4	6144	11.5	0.315	1.5	56.6	0.281	5	-130	0.9987	3.33	0.7	9.2	1	12	2
4	6145	7.4	1.52	0.35	6.1	-0.322	10	-108	0.9924	4.04	0.52	12.5	1	8	2
2	6153	3.5	1.89	0.07	2	0.759	-154	95	1.008	2.85	0.56	18.9	-1	6	1
4	6156	14.3	0.29	0.67	69.2	-0.442	248	525	1.043	2.9	0.5382	6.5	0	8	2
5	6159	8	-0.05	0.63	46.4	0.044	-140	163	1.016	4.14	0.69	15.4	0	9	3
5	6162	2.1	0.27	0.19	12.32	0.236	-256	114	1.031	3.25	0.5332	8.6	1	7	4
2	6184	-4.7	-1.31	1.89	27.2	0.039	-99	110	0.9578	4.36	-0.62	12.3	-1	7	1
2	6188	15.6	0.24	0.41	-34.4	0.046	64	145	0.9998	3.06	0.39	14.3	0	8	1
4	6189	0.7	-0.03	-2.6	40.4	0.937	-42	169	1.047	2.96	-0.26	6.4	-1	7	2
2	6191	8.2	0.5	0.35	44.8	0.0516	-168	127	0.9976	2.23	0.5533	12.1	-1	9	1
4	6211	8.2	0.18	0.31	8.876	0.039	96	249	1.013	3.07	0.52	9.5	1	9	2
4	6216	1.3	0.83	0.29	2.4	-0.118	-71	119	1.003	3.03	0.33	12.9	0	8	2
4	6218	7.6	-2.47	0.22	24.5	0.203	57	286	0.9509	3.71	-0.24	9.3	-1	8	2
4	6222	10	0.13	-0.67	-21.4	0.044	50	152	0.9934	3.45	0.98	6.3	0	9	2
4	6235	2.8	0.12	-0.15	5.2	-0.209	38	57	1.043	2.48	0.67	10.1	-1	7	2
4	6245	0.9	-1.08	-0.42	-32.6	0.055	45	-219	1.004	3.68	0.52	9.2	-1	8	2
4	6248	7.8	0.25	0.34	13.7	0.044	11	184	1.015	3.3	2.16	5.1	0	8	2
4	6253	17.8	0.32	-0.63	2.3	0.036	56	153	0.9978	4.28	0.97	9	0	9	2
2	6256	10.4	0.48	0.44	22.2	0.071	21	68	0.9992	4.2	-0.4	3	1	11	1
4	6257	-3	1.14	0.07	-1.141	0.013	37	212	1.041	3.04	0.35	7.3	1	9	2
2	6259	6.7	1.74	1.36	1.4	0.106	22	36	0.9525	4.26	0.3909	8.7	-2	8	1
4	6266	16.4	0.19	-2.81	1.976	-0.187	63	143	0.9912	2.54	0.62	8.8	1	7	2
4	6268	13.8	-1.06	1.19	-36.6	0.046	55.26	-57	0.9946	3.33	1.52	9.4	0	8	2
4	6275	15.1	0.3	0.49	40.6	0.445	17	105	0.9521	3.73	-0.62	12.4	-2	8	2
2	6280	5.8	0.45	0.27	20.8	0.081	190	-230	0.9914	3.07	0.42	24.3	0	6	1
2	6283	6.4	-0.2	0.22	26.5	0.347	-119	158.4	0.9944	3.29	0.32	10.1	-1	7	1
5	6288	6	0.14	-0.6	-48	0.0564	-87	89	0.9924	3.16	0.74	11.5	0	7	4
2	6289	7.2	0.585	-1.48	-14.9	0.04	143	-26	0.9968	3.44	-0.93	9.4	-1	8	1
4	6301	17.7	0.37	1.32	-86.8	0.11	-123	14	1.032	3.17	-0.39	13.6	2	8	2
3	6308	8	0.27	1.53	-12.9	0.053	18	134	0.9973	4.44	3.56	-3.2	1	9	2
4	6314	6.7	0.44	-0.06	-15.4	-0.058	183	11	0.9944	3.316	1.61	11.7	0	6	2
2	6315	11.5	-0.86	0.51	4	0.104	69	23	0.9996	1.85	1.78	10.1	-1	12	1
4	6316	6.1	1.41	1.41	7.1	0.184	-225	963	1.003	3.3	1.19	10.4	0	7	2
2	6317	6.7	0.27	0.33	-59.3	0.264	9	45	0.9914	3.247	1.54	17.2	0	7	1
4	6318	6.8	0.28	1.99	7.6	-0.281	30	162	0.9999	3.08	0.59	6.2	1	8	3
5	6323	6.3	0.41	0.79	7.1	-0.072	154	-59	1.004	3.2	0.42	11.6	-1	7	3
5	6329	4.8	-1.08	0.37	37.3	0.037	-262	272	0.9646	3.219	0.18	12.2	-1	5	3
2	6336	6.7	0.56	0.13	14.9	0.206	15	36	0.9592	3.61	-0.53	4.4	-1	7	1
4	6341	-7.1	0.345	0.34	-7.9	0.068	-28	143	0.9618	3.24	0.4	10.1	1	6	2
5	6348	6.3	0.59	0.37	7.9	0.047	58	-108	1.003	3.19	2.46	10.75	-1	7	3
4	6349	13.7	0.24	0.11	17.3	0.06981	-218	126	0.9989	2.12	0.47	9.2	1	7	2
4	6365	-4.6	0.25	0.37	13.5	0.06	52	192	0.9975	1.78	1.04	6.9	0	8	2
4	6372	8.5	1.67	0.34	90.5	0.041	32	161	1.049	3.58	0.4	22.3	0	9	2
2	6376	13.9	-0.14	0.18	7.4	-0.401	28.96	-62	1.036	3.53	0.71	5	0	7	1
4	6378	7.8	-0.15	0.26	1.9	0.088	288	53	0.9517	3.43	-0.95	9.2	0	9	1
4	6379	5.9	0.86	0.32	-54.8	0.022	-36	-42	0.9722	2.43	0.3251	11.5	1	7	2
2	6382	15.7	0.29	1.23	11.7	0.073	40	131	0.9958	3.38	0.34	14.5	-1	9	1
4	6383	6.9	0.34	0.74	11.2	0.174	-34	573	0.9663	3.18	0.81	11.7	-1	8	2
5	6389	1.9	0.63	0.27	8.8	-0.4	-111	-120	1.032	3.08	0.38	9.3	1	8	3
2	6390	8	1.13	0.03	5	0.1085	-8	101	0.992	3.8	0.78	12.3	-2	9	1
5	6392	-1.2	0.24	1.07	48.6	-0.306	140	746	0.992	2.95	0.49	18	0	6	3
5	6394	-8.1	-0.96	0.33	1.4	-0.077	256	55	0.9616	3.21	0.16	7	1	8	3
4	6402	7.2	0.62	0.4	-14.5	0.526	17	-305	0.9616	3.51	0.53	4.9	1	8	2
2	6404	8.7	0.17	-0.46	-26.7	0.215	32	106	0.9959	2.72	-1.26	20.1	2	7	1
2	6405	-9.7	-0.23	-0.64	-0.2265	0.04	5	-309	0.9913	3.99	-0.87	10.7	-1	6	1
2	6406	0.8	0.46	0.26	-51.9	0.467	131	83	0.9911	3.53	2.24	5.7	0	8	1
5	6409	9.1	0.27	0.45	17.9	-0.454	28	68.33	0.9664	3.2	0.46	10.1	0	10	4
5	6410	1.3	1.46	0	1.6	0.491	27	90	1.044	3.34	0.99	11.53	1	7	3
4	6411	-3.3	0.23	-2.55	7.2	0.041	21	90	0.9543	3.22	0.7	9.5	0	7	2
5	6421	9.9	-0.61	-0.99	2.6	-0.341	21	77	0.98	3.28	0.51	11.4	1	11	3
5	6428	10.6	0.17	0.24	16.8	0.577	9	162	1.079	3.17	0.38	12.9	2	8	4
2	6429	-3.5	0.57	-0.09	2.1	0.199	263</								

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	6558	6.8	0.18	0.46	1.4	0.064	-212	-273	1.043	3.37	0.45	11.1	0	7	2
3	6567	18.1	-2.78	1.08	8.5	0.047	52	242	0.9549	2.15	2.03	-1.7	-2	7	2
5	6569	6.5	0.13	0.42	-56	0.035	11	76	0.9701	2.42	0.76	23.73	0	7	3
5	6572	14.2	-0.7	0.39	70.3	0.058	26	-102	1.034	3.33	2.77	9	1	8	4
4	6577	7.5	1.75	0.67	-55.8	-0.352	53	166	1.022	2.9	0.41	2.7	2	8	3
4	6581	14.7	-0.83	0.44	48.9	-0.533	-93	97	0.9769	3.1	0.85	22	-1	7	2
4	6588	7.4	0.16	1.33	13.7	-0.001	-38	168	1.004	3.91	0.44	8.7	-1	8	2
2	6591	15.2	0.39	0.12	121.8	0.065	14	24	0.9559	2.69	0.53	12.4	1	8	1
2	6594	-2.3	0.22	-3.06	1.7	0.381	322	118	0.9991	3.74	-0.53	10.6	-1	7	1
4	6600	27.7	0.19	0	2.604	-0.529	149	304	0.9838	3.02	1.24	12.3	2	5	2
2	6602	5.5	0.31	0.25	55.3	-	203	165	0.9972	4.36	0.55	4.25	1	7	1
					0.00869										
2	6604	10.5	1.68	-1.22	4.75	0.033	-264	-24	1.012	2.2	0.42	11.8	0	7	1
4	6605	7.5	0.17	0	-50.2	-0.255	52	-279	0.998	3.03	0.46	8.9	0	8	2
2	6614	6.3	0.27	0.29	12.2	0.543	59	6	0.9978	3.58	0.6374	8.8	-1	7	1
4	6616	6.2	-0.03	0.76	-6.8	-0.091	14	88.91	0.9943	3.45	1.02	14.2	-2	7	2
2	6621	7.7	-0.94	-0.67	-23.65	0.053	509	435	0.9713	3.2	0.5	5.8	0	8	1
5	6640	8.3	0.35	0.42	23.7	-0.231	-172	913	0.9499	3.02	2.49	16.8	0	5	3
4	6641	7.7	0.86	0.35	-22.4	0.0357	314	370	1.02	3.36	-0.01	9.6	-1	8	2
2	6643	19.7	1.2	0.22	-82.9	0.08	136	-3	0.9961	3.78	-0.73	9.9	0	9	1
2	6644	-0.7	0.24	0.36	2	0.031	27	139	1.023	4.25	0.2704	16.8	-1	8	1
2	6649	5	-0.32	1.23	4.5	0.18	330	178	0.9896	3.45	-0.57	10.4	-2	6	1
4	6650	-1.7	0.2	0.37	-41.8	0.028	48.62	-85	1	3.14	0.7311	11.8	0	8	2
5	6655	16.2	0.58	0.32	4	-0.462	-216	92	0.9994	3.2	-0.4	8.3	1	7	4
2	6661	9.1	-0.93	0.24	2.1	0.388	-278	28	0.999	4.88	0.87	10.2	-1	10	1
5	6672	6.7	0.33	0.36	6.6	0.009	170	116	0.9981	2.35	1.59	13	0	7	4
2	6677	-1.1	1.17	0.24	7.8	0.43	53	589	0.9969	2.87	0.754	13.2	-1	6	1
2	6688	9.3	0.48	0.29	53.8	-0.225	166	16	1.03	3.22	0.72	11.2	0	10	1
5	6689	6.1	2.44	0.96	1.3	0.047	148	143.1	0.9925	3.71	0.46	10	1	6	3
2	6691	1.2	0.27	-1.08	2.2	0.03525	26	117	0.9696	1.95	0.3	21.6	-1	7	1
4	6692	5.8	0.31	-1.13	4.5	0.024	28	94	0.9785	3.25	0.61	18.2	1	6	2
5	6694	8.1	-0.5	1.66	8.1	0.297	155	174	0.9923	3.1	-0.93	11.6	-1	9	3
2	6702	7.6	0.55	0.32	1.3	0.488	23	203	0.9903	3.33	0.5339	16.5	-1	8	1
4	6714	18.5	1.02	-0.4	4.5	0.068	26.96	110	1.033	3.3	2.03	7.9	0	8	2
5	6716	19.6	-0.01	0.39	10.7	0.044	30	180	1.027	2.49	0.71	10.8	1	8	3
4	6724	15	0.16	0.33	4.8	0.043	-233	-683	0.992	3.01	1.71	10.59	0	7	2
2	6725	0.2	-0.09	-0.02	8.764	0.544	45	147	0.9985	3.09	0.5	10	-1	7	1
4	6730	3.8	0.2	0.71	1.6	0.534	-145	248	1.066	1.91	1.06	11.5	0	8	2
2	6735	5.1	1.41	0.54	7	0.046	160	176	1.006	2.03	0.7	9.8	0	7	1
2	6738	6.8	0.48	0.08	7.8	-0.258	277	38	0.9518	4.91	0.65	9.6	0	7	1
2	6739	16.1	-2.66	3.23	-16.5	0.044	-36	-156	0.9932	2.64	-1.1	13.6	0	7	1
4	6743	7.8	0.19	0.29	5.5	0.042	44	-181	0.993	3.19	0.47	10.3	0	7	2
2	6747	7.6	1.27	0.39	-27.3	0.038	21	115	0.9652	2.1	0.67	10	0	8	1
5	6750	-0.7	0.32	0.26	12	-0.531	63	170	0.9853	4.06	1.49	9.9	2	7	4
4	6751	3.9	-1.02	0.3	1.3	0.052	235	86	0.9795	3.17	0.7687	16.95	-1	6	2
5	6753	8.1	-0.06	0.34	-38	0.048	-43	-318	0.9326	2.99	1.06	11.3	0	7	3
2	6754	7.1	0.68	0.72	11.2	-0.456	392	22	0.9969	3.48	-1.22	12.2	1	8	1
2	6755	6.3	0.3	2.1	7.4	0.053	34	560	0.997	5.04	-0.94	3.6	-2	7	1
4	6762	6.9	1.59	1.83	-3.2	0.932	-87	118	0.9955	3	0.63	17.5	0	7	2
4	6764	8.6	-0.7	0.25	3.4	0.024	-148	-94	1.03	2.7	0.37	13	0	8	2
5	6772	-15	0.42	-0.6	35.4	0.048	16	42	1.022	3.71	0.74	20	1	5	3
2	6774	7.2	0.62	0.01	2.3	0.065	22	335	0.9654	3.32	0.51	11.8	-1	8	1
4	6787	7.4	-0.99	-0.47	34.5	0.037	-4	-66	1.012	3.25	-2.14	12.4	-2	7	2
4	6789	9.7	1.845	0.49	6.1	0.122	-116	577	1.018	2.8	1.14	9.3	0	10	2
4	6793	5.2	0.39	1.54	42.6	0.037	-36	138	1.023	2.71	0.43	4.5	0	7	3
4	6798	-2.2	0.28	1.98	26.7	0.079	400	225	0.9948	3.05	2.03	7.7	1	8	2
4	6799	20	-0.51	2.33	2.2	0.09	5	28	0.9988	3.14	-1.07	2.3	1	11	3
4	6800	-1.5	-2.305	0.76	-37.45	0.035	140	-68	1.029	4.43	0.34	18	0	6	2
4	6802	5.4	0.375	0.4	14.7	0.02506	249	133	1.045	3.19	0.52	12.9	-1	6	2
2	6808	6	0.28	0.25	1.8	0.221	8	108	0.9929	2.41	3.68	9.3	-1	7	1
4	6809	10.1	-0.19	0.28	4.1	-0.342	191	-89	0.9818	2.65	0.38	13.8	0	6	2
4	6812	7.8	0.4	0.22	-30.6	0.657	308	23	0.9966	5.12	0.3192	16	1	9	2
2	6814	6.6	1.37	-0.85	3.1	0.718	-119	135.1	0.9464	2.95	0.45	11	0	7	1
2	6816	6.7	-0.85	0.3	-16.8	0.029	96	127	0.9953	3.31	2.22	12	-1	7	1
2	6822	8.5	0.28	-1.44	13.8	-0.107	183	327	0.9981	3.13	0.4	9.9	0	9	1
4	6829	7.2	0.4	0.49	-2.2	0.037	146	86.94	0.93	3.26	-0.05	10.48	0	8	2
2	6834	6.7	0.65	0.37	11.3	-0.528	79	173	0.9963	3.08	-0.25	4.6	-1	7	1
5	6836	11.6	-1.9	1.4	-12.4	0.043	52	-13	0.9515	3.35	0.44	10.7	0	6	3
5	6839	14.7	0.13	0.28	0.9	0.407	52.12	431	1.041	3.02	0.6409	11.2	-1	7	3
4	6840	5.4	0.205	1	12.55	0.051	90	-155	0.9956	3.4	0.7242	11.2	-1	6	2
5	6843	10.2	-1.12	0.41	70	0.043	280	151	0.9878	1.96	0.6	10.2	1	7	3
2	6846	2.9	2.4	1.58	-35.4	-0.122	293	-100	0.9991	2.77	0.45	4.3	-1	9	1
2	6848	-5.1	0.67	-0.63	13	0.508	510	567	0.9519	2.93	0.67	13	-1	8	1
2	6852	7.4	-0.94	0.49	-71.7	0.037	33	156	0.992	2.33	0.4775	13.4	-1	8	1
5	6856	7	1.44	0.28	-47.9	0.333	258	204	0.9737	3.79	2.11	10.28	1	8	4
4	6860	23.5	0.755	-0.89	7.7	0.049	53	217	0.9672	2.95	2.15	9.578	1	7	2
5	6866	-12.6	-1.08	1.16	-0.4	0.11	55	204	0.9383	3.16	-0.48	7.6	0	7	3
5	6870	7	0.2	-1.02	133.1	0.631	137	68	0.9594	3.19	1.28	11.5	0	8	3
5	6878	14.7	0.48	0.31	1.4	0.046	136	135	0.9517	3.72	0.5169	9.8	1	8	3
5	6880	7.9	0.25	1.1	-43.6	0.491	33	549	0.9918	3	0.32	11.8	1	8	3
4	6885	7.6	0.23	0.29	119.4	0.06457	-126	91	0.9949	4.39	0.8	9.7	2	8	2
4	6897	-2.6	0.08	1.26	12.8	0.062	19	171	0.9981	3	1.31	4.6	0	7	3
5	6902														

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	7022	-2.1	0.31	0.97	-22	0.0302	19	72	0.9954	3.107	0.72	18.5	1	9	2
2	7025	6	0.26	-0.92	10.14	0.046	6	252	1.035	3.97	0.61	19.9	-1	7	1
2	7029	-2.8	-0.11	0.96	54.4	0.048	101	207	1.027	2.54	0.3	9.1	2	6	1
2	7031	-4	0.32	0.07	45.5	0.054	63	212	0.9953	3.22	-1.88	9.7	-1	7	1
2	7037	0.9	0.2	0.26	18	0.04	36	154.2	0.9924	2.18	-0.17	10.8	-1	8	1
4	7038	14.3	-0.86	0.33	7.7	0.003	27	98	0.9935	2.65	0.41	12.2	0	9	2
2	7043	6.4	0.32	0.88	53.8	0.05	214	180	0.9721	3.33	-1.22	9.6	-2	7	1
2	7049	9.1	-0.48	0.42	1.433	0.479	106	-169	0.9734	2.93	-0.74	9.4	1	7	1
2	7052	7.5	0.25	-0.25	-3.2	0.024	503	-34	0.9956	3.18	1.9	10.8	1	8	1
5	7053	6	0.26	0.51	13.94	-0.527	10	72	0.9539	3.31	0.48	9.65	0	7	3
4	7056	-3	1.73	1.6	-54.6	0.454	40	107	1.004	3.26	-0.9	14.1	-1	6	2
5	7057	6.7	-0.21	0.08	3.75	0.067	266	16	0.9933	3.43	-0.35	10.58	0	7	3
2	7080	7.4	0.27	0.61	67.8	0.04975	159	193	0.9986	2.46	-0.13	9.2	0	8	1
4	7086	-6.8	-0.29	0.16	26.8	0.044	343	-53	1.028	4.27	1.11	11.2	-1	6	2
4	7087	7.4	0.35	-1.03	-12.8	0.421	50	231	1.001	3.64	0.54	9.2	0	9	2
4	7105	6.2	1.12	1.49	50	0.046	54.07	136	1.053	3.17	-0.87	11.02	0	7	2
4	7108	7.3	0.07	0.49	9.4	0.432	29	134	0.9939	2.99	0.5217	11	-2	8	2
4	7121	7.1	0.36	1.11	42.4	0.634	211	140	0.989	3.11	0.63	11.7	-2	8	2
2	7122	19.8	0.58	0.37	1	-0.027	10	-118	1.026	3.08	-0.87	11.4	-1	8	1
2	7125	6.3	0.21	-0.03	65.5	0.051	46	465	0.9928	3.23	0.83	13	0	7	1
2	7132	15.4	0.28	-1.6	63.1	0.042	-86	195	0.9912	3.22	-0.14	5.6	1	7	1
4	7134	15.2	1.61	-0.8	50.9	0.042	20	-200	0.9996	3.71	1.98	12	0	8	2
2	7151	11.7	0.35	0.74	-56.4	0.044	-99	-36	1.061	3.13	0.6106	14.4	0	8	1
5	7152	21.5	0.18	0.31	50.7	0.058	38	519	0.9931	3.52	0.53	10	-1	8	3
2	7157	5.5	0.375	0.38	-50.7	0.036	-150	98	0.9914	3.29	0.59	14.1	0	6	1
2	7159	14.3	0.55	-1.45	1.8	0.522	161	309	0.9669	3.49	0.68	10.5	0	8	1
2	7166	8.3	0.43	-1.08	64.5	0.557	-72	-122	1.028	3.11	1.68	6.6	1	8	1
4	7167	6.8	0.22	0.49	-40.7	0.052	-75	128	0.9159	3.93	1.01	16.1	0	8	2
2	7177	6.7	-0.63	0.37	-18.8	0.036	45	245	0.9896	3.19	0.51	10.1	0	7	1
2	7179	-4.4	-0.86	0.19	28.9	0.408	-115	516	0.9924	3.14	0.07	10.4	-1	7	1
5	7181	7.1	0.11	0.07	1.6	-0.139	-220	-19	0.9695	3.43	0.59	10.2	2	8	3
4	7183	7.6	1.09	0.9	31.4	0.207	49	146	0.9911	2.19	1.97	11.6	2	8	2
3	7186	14.7	0.34	0.66	-9.4	-0.524	242	164	0.9833	2.55	-1.2	3.6	0	7	2
5	7193	6.6	0.3	1.76	3	0.551	-233	762	0.9852	3.1	0.63	21.7	1	7	3
4	7205	6.1	0.125	0.25	3.3	0.512	10	-146	1.036	3.98	0.4846	9.2	-1	6	2
2	7207	5.9	0.25	1.73	12.4	0.224	-127	162	0.9916	3.422	1.56	4.9	0	6	1
4	7209	13.5	0.33	2.01	-15.7	0.056	6	-752	0.994	3.58	0.71	6	0	9	3
4	7216	1.5	1.12	0.24	1.5	0.05	56	189	0.9931	3.24	0.5106	0	1	7	3
2	7232	22.4	1.33	0.5	-9.3	0.06708	10	21	1	3.12	1.18	4.9	0	13	1
4	7235	5.3	-0.74	0.12	6.6	0.043	-20	504	0.9647	2.5	0.6663	10.4	-1	6	2
2	7238	17	0.36	0.26	40.9	0.03	43.5	39	0.9948	3.03	0.49	12	0	9	1
2	7240	7.2	0.61	-2.8	7.2	0.06	239	485	0.9727	4.21	1.62	4.9	-1	8	1
2	7243	12.7	2.86	0.14	-36.9	0.88	-189	128	0.9948	3.98	0.51	9.4	-1	7	1
2	7252	4.5	-0.31	-0.17	-27.2	0.108	30	548	0.9974	2.96	0.57	9.4	-1	8	1
2	7269	6.6	0.38	1.54	2.6	0.041	24	81	0.9915	3.18	0.5	10.9	-1	7	1
4	7275	16.6	0.02	-0.67	-104	-0.358	10	102	0.9467	3	0.662	11.6	0	8	2
2	7281	8.3	0.43	-0.05	77.8	0.792	-9.25	-95	0.9979	4.56	0.7955	9.237	0	9	1
1	7283	6.2	0.47	1.2	8.3	0.029	288	142	0.9058	3.22	0.14	-0.6	-2	7	1
5	7287	4.7	0.15	0.28	-27.1	0.029	284	107	1.041	3.24	0.46	10.4	2	7	3
5	7289	-3.2	0.19	1.55	1.2	0.068	11	405	0.9918	2.83	-0.02	11	2	9	3
5	7291	3.9	0.54	-0.84	-14.9	0.32	96	-152	1.003	3.6	0.6916	10.6	0	7	3
5	7294	13.8	-0.44	-144	11.6	0.044	61	189.9	0.9966	3.14	1.58	18.6	2	7	3
5	7304	5.2	0.21	0.81	92.3	-0.279	225	95	0.9895	3.93	2.15	12.4	1	6	3
4	7308	7.1	2	0	-39	0.361	-147	-174	0.9962	3.22	0.36	6.5	1	8	2
4	7313	3.3	-0.49	0.09	33.8	-0.195	-125	93	0.9726	3.03	2.81	10.6	-1	8	2
4	7319	6.9	1.58	-0.35	-27.9	0.025	-168	354	0.9957	3.23	1.48	10.8	0	8	2
2	7325	7.7	-0.73	-0.05	5.1	0.07719	81	142	1.049	3.36	0.33	10.1	-1	7	1
2	7326	-6.8	0.665	0.58	1.5	0.066	27	49	0.9966	3.39	2.02	14.1	0	8	1
5	7330	-1.9	0.2	-0.45	1.5	-0.094	94	147	1.035	3.38	0.56	9.9	1	7	3
3	7332	7.3	0.22	-0.59	-25.55	0.598	31.5	395.5	0.9974	3.36	1.74	4.2	1	8	2
4	7337	5.7	0.2	0.3	6.1	0.037	-370	120	0.9939	3.24	0.51	10.8	-1	8	2
2	7341	7.9	1.16	0.35	51.4	0.157	1	44	0.9973	3.3	2.4	9.5	0	9	1
5	7346	7.2	-1.12	-1.16	60.5	0.055	-89	205	1.013	3.12	0.5	7.7	1	8	3
4	7353	7.3	0.25	0.36	3.696	0.034	262	129	0.9435	3.25	0.4	7.4	-2	8	2
5	7354	4.1	0.24	0.33	1.2	0.028	302	433	0.9686	3.03	0.51	12.5	0	9	3
5	7361	7.6	-0.96	1.82	27.7	0.04	65.22	-36	0.9907	2.92	0.618	20.6	0	8	3
2	7366	4.7	0.47	1.25	4.8	0.275	14	28	0.9952	2.15	0.73	11.2	1	9	1
5	7368	6.4	0.12	-0.75	9.6	0.237	209	267	0.9965	3.01	1.83	11.7	1	7	3
5	7372	9.1	0.5	0.93	-10	0.065	92	-62	0.9977	3.32	0.78	10.5	0	10	3
4	7375	7.2	0.34	0.68	5.574	0.312	245	68	0.9959	3.37	1.67	10.1	-1	8	2
5	7377	7.7	0.2	0.44	13.9	0.218	251	130	0.9986	3.11	0.48	10	2	8	3
5	7380	6.4	0.16	2.77	-57	0.037	148	-247	0.9959	3.38	-0.26	9.8	1	7	3
5	7382	6.4	-0.24	0.4	1.5	0.05794	220	28	0.9897	2.65	1.01	12.32	0	7	3
2	7385	7.5	0.32	0.26	1.8	0.042	265	-187	0.9938	3.07	0.38	14.9	0	8	1
2	7392	8.5	1.52	0.36	66.3	0.041	208	34	0.9982	3.08	0.31	10	0	9	1
3	7395	-1.6	0.3	1.65	1.165	0.65	155	111	0.9871	3.12	-1.19	4.3	1	8	2
5	7397	2.1	1.51	1.95	55	0.039	-221	26	0.9649	3.18	2.12	12.1	-1	8	3
5	7403	14.9	0.9	0.37	8.8	0.037	31	103	0.9939	3.13	0.49	10.3	-1	8	3
4	7406	6.9	-0.8	1.95	-3.776	-0.209	120	74.14	0.9932	2.99	-0.19	9.2	-1	8	3
2	7409	11.1	1.26	0.69	-48	-0.36	5	82	0.9986	3.17	1.28	7.8	0	12	1
4	7410	7.4	-0.45	-0.58	19.9	0.03	100	433	0.9953	3.13	-0.26	12	0	8	2
3	7412	1.2	0.72	0.02	2	0.073	2								

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	7536	7	-0.61	1.54	14.6	0.381	227	737	0.9994	3.34	0.67	8.8	0	8	2
2	7539	7.1	0.735	0.16	1.9	0.1	15	189	0.9883	3.27	-0.65	9.3	-1	8	1
4	7547	8	0.01	1.5	17.2	-0.522	98	-11	0.9996	2.96	0.9	5.7	2	8	3
2	7549	16.7	0.21	0.28	4.6	0.309	40	199	0.9964	2.84	-0.09	10	0	6	1
2	7552	7	-0.89	-1.06	15.7	0.036	64.7	109	0.9912	0.76	1.51	7.2	0	8	1
4	7554	6.5	0.99	0.27	-84.4	-0.077	44	443	0.9799	1.66	0.0498	9.4	-1	7	2
4	7556	7.7	1.54	1.94	7.93	0.046	60	-7	0.9594	3.08	1.35	13.4	0	9	2
4	7564	7.7	0.39	1.82	10.91	0.056	293	110.8	0.9998	3.27	1.5	15.7	0	8	2
2	7566	6	1.38	-1.13	15.5	-0.313	31	53	0.9667	3.43	0.44	9.4	0	7	1
5	7570	10.7	1.2	-0.38	14.9	0.039	47	730	1.003	3.14	0.35	14	0	7	3
2	7571	6.9	0.28	0.4	8.2	0.036	15	95	1.011	2.37	0.33	8.5	1	8	1
4	7572	14.1	1.52	-1	5.4	0.053	5	104	1.009	3.3	-0.99	4.6	0	7	2
2	7575	7.8	1.5	0.22	1.4	-0.104	24	-157	0.9963	4.41	0.48	6	-1	8	1
4	7586	14.6	1.43	-1.06	2.5	-0.272	8	20	0.9992	2.74	0.82	10.3	1	13	2
5	7589	-2.9	0.24	0.19	46.6	0.048	-4	344	0.9874	3.1	0.71	9.7	1	8	3
2	7590	8.8	-0.82	-1.04	8.7	0.514	20	90	0.9835	2.87	0.14	10.63	0	8	1
4	7597	7.2	0.27	0.28	-31	0.188	205	394	0.9686	3.08	0.39	11	0	8	2
4	7602	7.2	0.25	0.78	14.4	0.055	70	-208	0.9986	3.12	0.38	9	1	8	2
5	7604	10.4	0.32	1.41	46.1	0.026	34	46	0.9643	2.09	0.35	18.6	0	8	3
2	7605	6.5	0.29	-1.27	3	0.036	38	93	0.9906	3.16	2.37	15.6	0	7	1
2	7612	12.7	-1.15	0.26	2	0.111	-34	60	1.027	2.94	2.08	6.7	0	11	1
4	7615	12.5	-0.18	0.18	29.4	0.45	-170	-96	1.053	3.06	0.5	3	0	7	3
2	7617	6.8	-1.81	1.39	37.5	-0.757	-12.7	245	0.9494	3.23	0.23	3.5	0	7	1
4	7624	7.2	0.27	1.84	8	0.044	-131	55	0.9964	3.71	-0.64	9.2	0	8	2
5	7632	6.6	0.24	0.45	-44.3	0.603	42	587	1.025	3.56	0.47	10.89	0	7	3
4	7639	10.5	1.37	-0.61	49.3	-0.349	101	52	0.9937	2.99	-0.65	11.7	1	10	2
2	7642	-3.5	0.55	0.21	5.85	0.241	40	-68	0.9588	1.99	0.57	12.8	1	8	1
4	7643	0.9	1.55	-1.04	90.5	0.333	18	458	0.9921	2.93	-0.27	11	0	9	2
4	7649	-3.3	0.19	-0.37	-50.2	1.211	-48.5	158	0.9986	3.14	1.46	9.1	0	8	2
2	7650	6.3	0.62	-0.7	6.3	-0.272	49	152	1.024	3.29	0.3011	17.1	-1	7	1
4	7653	6	0.26	-3.12	7	0.134	50	481	0.9959	4.16	1.99	15.2	0	6	2
2	7654	-2.3	0.47	0.32	34.5	0.009	187	147.1	0.9958	3.21	0.34	10.48	1	7	1
5	7657	5.2	-0.72	0.28	21.8	0.028	22	98	0.9907	3.94	0.37	8.3	1	7	3
2	7662	-1.7	0.26	0.21	16.2	0.528	263	523	0.998	3.02	0.5	9.8	-1	9	1
4	7669	5.5	1.74	0.23	14	-0.162	16	124	0.9944	3.26	0.38	11.5	0	6	2
2	7671	8	-1.01	0.36	7.569	0.46	191	333	1.017	4.08	0.72	11.6	0	9	1
2	7675	2.6	1.19	0.21	5.1	-0.191	-37	182	0.9742	3.82	1.52	9.6	0	7	1
5	7678	10.8	0.28	0.29	1.6	0.052	231	262	0.9929	4.32	1.7	10.6	0	7	3
5	7682	-6.4	-0.3	-0.38	8.761	0.01587	60	328	0.9932	3.24	0.66	16.4	0	8	3
2	7688	24.3	-0.54	0.24	19.95	0.074	32	174	0.9992	3.18	0.44	15.8	-1	7	1
2	7689	7.2	0.47	-0.35	10.1	0.083	298	182	0.9118	3	-0.66	22.4	-1	8	1
4	7690	6.1	0.16	0.78	1.2	0.209	7	-399	0.9522	4.42	-0.76	5	1	8	3
2	7692	7.8	0.26	1.75	56.5	0.045	21	-188	0.9931	1.93	0.98	10.3	0	9	1
5	7699	7.2	-0.14	-1.05	-118.2	0.59	237	63	0.9895	2.09	0.53	13.3	1	8	3
4	7705	12.8	0.16	0.27	47.5	0.109	-166	168	0.9433	4.29	0.37	5.9	-1	6	2
5	7712	6.9	1.5	-0.45	-43.7	0.059	36	174	0.9917	3.74	0.7517	11.34	-1	8	3
4	7726	-12.4	-0.95	0.16	14.9	0.426	59	240	0.999	2.22	0.45	8.9	1	8	2
1	7728	6.2	0.39	0.25	-4.25	0.476	3.855	-570	0.9917	2.69	1.95	-0.4	-2	7	1
4	7735	10.3	0.53	2.11	-31.5	0.063	6	25	1.041	2.45	3.12	10.4	1	11	2
2	7737	6.4	0.09	0.32	1.4	0.602	124	67	0.992	2.74	0.41	11.4	-1	7	1
4	7739	17.4	1.56	0.66	2.9	0.679	63	-270	0.9993	3.85	0.34	12.5	0	7	2
5	7743	-1.1	0.61	-0.49	-56.1	0.037	-200	113	0.9878	3.12	0.23	25.1	1	7	3
4	7744	6.2	1.19	0.36	-1.7	0.822	116	119	0.9682	3.23	0.27	4.9	2	7	2
2	7746	1.9	0.08	0.49	44.1	0.05	93	148	0.9945	3.46	0.44	10.9	-1	8	1
2	7749	5.9	0.51	-0.08	1.7	-0.067	13	31	0.9976	3.36	1.49	4.9	-1	8	1
5	7750	10.7	-0.33	0.37	39.4	-0.185	103	220	0.9637	3.62	0.65	11.5	0	11	3
4	7752	6.2	-0.595	0.89	-41.4	0.036	4	128	0.917	3.4	1.99	12.2	0	7	2
4	7755	7.2	0.57	1.1	9.8	0.081	17	289	0.9734	3.38	-0.3	6.2	1	8	3
4	7756	7.2	0.39	2.09	11	0.047	42.77	178	0.9976	4.34	0.6259	12.5	0	8	2
5	7762	5.8	-0.7	0.32	-3.9	0.024	28	455	1.004	3.78	0.485	8.8	0	6	3
4	7764	7.2	1.82	0.18	-23.4	0.604	37	31	0.9976	3.39	0.72	9.6	1	8	2
2	7769	0	0.34	0.39	6.1	0.046	29	-103	0.9776	3.48	-0.05	10.7	-1	7	1
2	7770	-1	1.49	-0.51	12.1	-0.425	68	210	1.02	3.05	0.24	12.3	-1	8	1
5	7776	6.5	0.26	0.28	-52.8	0.046	80	19	1.028	3.18	-0.57	7.8	1	7	3
5	7778	10.1	-0.23	0.44	1.5	0.046	187	182	0.9946	2.74	0.52	12.3	1	7	3
2	7784	2.5	0.015	0.04	-54	0.464	48	111	0.9906	2.14	0.32	14.7	-1	7	1
4	7786	-10.3	1.47	0.31	14.5	0.045	-9	83.45	0.9986	4.15	-0.33	8.8	-1	8	2
4	7789	5.7	0.135	1.04	-91.8	0.042	19	695	1.044	3.79	0.42	10.47	-1	6	2
4	7793	6.9	1.285	-2.97	-33.4	0.526	-212	63	0.9473	4.24	0.78	9.9	1	8	2
2	7794	6.1	-0.03	-0.52	30.9	-0.104	-11	45	0.9226	4.63	-0.83	16.8	-1	7	1
4	7804	5.8	-1	0.22	-52.1	0.09873	42	206	1.04	3.32	0.38	12.3	-1	6	2
4	7811	7.5	0.3	-0.08	6.55	0.08171	-36	78	0.9689	3.265	3.17	11.1	1	8	2
2	7813	6.4	0.37	0.12	-26.6	0.056	6	91	1.008	4.11	0.46	8.4	0	7	1
2	7815	6.8	2.01	0.22	-60.4	0.443	180	-344	1.03	4.4	-0.65	15.7	1	8	1
4	7817	19.8	0.43	-0.8	-47.7	0.145	-49	120	0.9962	3.21	0.49	10.2	0	9	2
4	7818	9.7	0.2	1.61	1.2	-0.547	48.08	-89	0.9926	4.49	0.34	9.9	0	8	2
6	7821	5.6	0.86	1.37	0.9	0.557	7	140	0.9408	3.45	-2.82	14.8	1	7	4
5	7825	7.4	1.3	0.04	10.2	0.043	324	175	0.9536	2.98	-0.5	11.9	-1	6	3
5	7830	6.7	0.32	-2.12	33.4	0.031	31	376	0.9895	3.12	0.35	7.8	1	7	3
4	7832	6.5	-0.21	0.8	-4.6	0.08191	32	-144	0.981	2.13	0.5	9.2	0	7	2
4	7835	6.8	0.28	0.35	-44.3	0.042	16	118.8	0.9795	3.19	-2.23	12.4	0	7	2
5	7839	2.8	1.35	0.19	1.7	0.603	280	155	1						

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	7969	9	0.57	0.02	-58.6	0.077	18	84.1	0.9523	2.75	0.62	7.8	0	8	1
4	7971	-2.7	0.21	2	-15.8	0.042	36	167	0.9456	2.1	-0.66	5.2	1	8	2
4	7974	15.3	0.2	0.36	2.8	0.41	292	-392	0.94	3.168	0.38	12.6	-1	8	2
2	7976	-3.1	1.51	-0.35	1.6	0.628	191	131	0.9445	3.93	0.5208	10.5	0	8	1
5	7986	-6.5	0.36	1.42	-16.2	-0.159	58	135	1.047	3.22	-0.82	11.6	1	8	4
2	7987	-3.8	1.96	-0.97	1.8	-0.188	12	-29	0.9977	3.5	0.7	9	-1	8	1
5	7993	9	0.54	0.5	0.1	0.048	26	-563	0.9918	2.54	0.34	12.4	0	10	3
4	7996	-5.2	0.19	0.35	1.5	0.037	-68	107	0.9901	3.18	0.68	12	0	7	2
2	7998	6.6	0.36	0.52	-25.9	-0.506	115	140	0.9963	3.07	1.04	3.9	1	7	1
5	8018	10.9	0.44	0.76	6.55	0.58	136	76	0.9734	3.73	0.22	12	-1	12	3
2	8019	11.6	0.56	0.3	12.8	0.271	72.29	454	0.9549	1.38	0.52	12.1	-1	7	1
2	8027	18.5	-0.83	0.34	-42.3	0.035	34	177	0.9969	4.09	0.4569	2.4	-1	7	1
4	8036	11.3	0.22	0.39	3.862	0.038	21	149	1.018	3.02	0.54	14.4	0	7	2
4	8040	6.2	-1.17	0.36	-32	0.045	249	180	1.006	3.08	-0.4	4.9	1	7	2
2	8044	5.6	0.66	-0.32	3.3	0.087	3	11	0.9617	2.91	1.42	10.48	2	6	1
4	8050	-9.7	-0.33	0.34	-27.6	0.039	99	140	0.9959	3.02	-0.41	7.7	-1	8	2
4	8052	9.9	1.56	1.17	2.3	-0.04	16	23	0.9991	3.98	0.62	14.3	0	11	2
5	8054	9.9	0.95	-0.41	-16.2	0.087	220	220	1.007	2.77	0.44	11.9	1	11	3
4	8057	6.2	0.78	0.26	-56.5	-0.192	-71	158	0.9883	3.52	-0.33	12.2	0	7	2
5	8058	3.9	0.7	-0.6	24.1	-0.067	266	115	0.9733	2.38	-2.82	10.9	0	7	3
2	8059	19.5	0.12	-0.68	-52.7	0.184	76	192.4	0.9952	3.97	0.42	13.4	0	8	1
5	8066	1.6	0.18	0.6	19.25	-0.213	38	167	1.026	2.93	0.52	9.1	-2	7	3
5	8070	7.5	0.79	0.38	12.7	-0.297	451.5	592	0.9971	3.11	-0.36	10.4	2	8	3
5	8072	6.1	0.22	0.66	47.4	0.43	40	129	0.9919	5.98	1.8	10.9	2	7	3
2	8078	5.7	0.15	0.28	13.18	0.045	240	151	1.012	3.22	-0.07	11.2	-1	6	1
4	8079	6	0.24	0.49	5.8	0.053	204	216	0.9942	3.01	0.98	13.5	-1	7	2
5	8080	7.1	0.12	0.3	11	0.018	-152	16	1.011	4.06	0.52	11.9	0	8	3
5	8081	4.8	0.33	1.13	-12.7	0.044	205	-173	0.987	2.44	-0.94	13.3	0	8	3
4	8088	7.1	0.23	0.24	-1.5	0.039	90	33	0.9948	3.23	0.28	10.48	0	8	2
2	8091	5.2	0.4	-0.4	4.6	0.425	8	-71	0.9957	2.73	2.86	9.1	0	8	1
2	8094	18.4	0.25	0.29	7.5	-0.072	-285	-223	0.9875	3.08	0.38	7.4	0	8	1
2	8095	-13.1	0.27	0.98	-58.5	0.02	11	66.83	0.9436	3.32	1.34	12.6	-1	6	1
5	8099	-0.8	0.2	-1.57	63.8	0.031	127	77	0.9905	2.01	0.36	10.9	0	6	3
5	8101	7	0.15	1.68	-1.353	-0.315	35	477	1.006	3.22	0.42	14.9	1	8	3
5	8102	6.2	-0.85	0.43	2.6	0.036	37	92	0.9422	3.27	-0.44	11.5	1	7	3
5	8116	-0.1	-2.34	0.28	4.9	0.03	29	98	0.9902	4.22	0.58	12.8	0	7	3
5	8125	11.1	0.24	-0.15	-22.6	0.229	298	401	0.9954	3.23	0.52	9.3	0	7	3
5	8134	6.7	0.48	0.32	2.5	0.288	22	469	0.9889	4.29	1.1	17	2	8	3
4	8139	7.7	1.14	0.26	-44.4	0.089	23	560	1.018	2.07	-1.01	7.7	1	9	2
4	8141	6.8	0.28	-0.51	22	0.048	-74	175	1.025	2.95	0.68	8.7	1	7	2
2	8147	-0.3	-1.25	-0.63	5.6	0.042	2	-43	1.03	3.15	1.78	9.9	0	7	1
6	8158	6.5	0.14	0.31	45.3	0.13	-154	100.7	1.024	3.34	0.35	14.4	1	7	4
2	8160	6.2	0.24	1.48	4.6	-0.255	37	135	0.9563	3.2	-0.55	13.1	-1	7	1
4	8165	8.2	1.16	0.47	11.2	0.05083	61	822	0.9959	3.12	0.77	9.5	-1	7	2
2	8187	7.5	1.28	0.34	3.5	0.023	-170	189	0.9949	3.42	0.58	10.1	-1	7	1
4	8205	7.6	-0.53	0.26	1.6	0.236	-198	88	0.9568	3.11	0.5906	8	0	8	2
2	8209	6.4	1.31	0.98	1.8	0.505	14	-302	1.038	2.96	0.66	9.9	1	7	1
4	8211	1.4	0.42	0.33	8.1	0.048	45	-43	0.9502	4	0.5632	9.3	0	7	2
4	8232	-0.9	-0.53	1.04	11.8	0.352	28	-306	0.9961	2.4	0.49	9.7	0	7	2
4	8236	7.6	-0.48	-1.74	15.8	-0.636	-132	89	0.9641	3.42	0.41	9.4	1	8	2
5	8237	10.9	0.335	-0.88	1.3	-0.352	293	168	0.9921	3.429	0.46	10.47	1	5	3
6	8238	11.2	-0.83	0.41	1.415	0.038	52	-37	0.9094	3.95	0.4	17.4	1	5	4
5	8245	15.8	-0.25	0.2	-6.2	0.057	-122	42	0.9949	3.2	-1.21	9.9	0	8	3
2	8256	6.7	0.2	0.24	-16.3	0.186	121	100	1.007	3.12	0.5409	10.4	0	7	1
5	8268	8.1	2.44	0.8	53.3	0.1343	-40	176	0.9954	2.22	0.55	13.4	-1	9	3
2	8269	4.4	0.15	-0.28	51.1	0.044	-10.5	493	0.9467	3.24	0.78	10.2	-1	7	1
4	8270	6.8	-0.41	0.35	7.8	0.881	-22.07	155	0.993	4	0.43	9.5	1	7	2
2	8286	6.6	3.01	0.3	-3.8	0.052	-232	140	0.9722	3.02	0.5	9.2	0	7	1
4	8289	-4.3	0.36	-0.6	13.55	0.05638	44	-64	1.02	2.97	0.66	11	0	7	2
4	8301	6	-0.49	0.39	55.5	-0.216	17	100	0.9957	4.03	1.03	6.9	-1	10	3
4	8305	12.1	1.25	0.42	-47.1	0.044	212	189	1.043	3.22	0.48	11.3	-1	7	2
2	8310	6.1	0.34	0.21	5	-0.359	-53	300	0.9937	2.76	0.53	13.6	0	7	1
2	8312	7.2	1.55	0.36	82.2	0.382	68	162.7	0.9992	4.24	0.76	9.046	2	8	1
5	8318	7.7	-0.43	-0.18	-11.5	-0.107	36	461	0.9895	3.19	-0.26	11.5	1	8	3
5	8321	6.9	-0.32	0.91	2.4	0.546	-45	157	0.9424	3.49	1.75	12.3	0	8	3
2	8328	1.8	0.36	0.86	15	-0.05	61.54	256	0.9744	1.54	0.64	8.6	1	9	1
4	8331	12.8	1.43	0.07	5.649	0.1339	17	565	0.991	2.94	0.34	14.5	1	8	2
2	8334	6.3	1.02	0	2	0.083	27	140.4	0.9944	3.59	-0.87	11.4	0	7	1
4	8344	6.6	-0.66	1.64	3.9	0.039	210	395	0.9915	2.81	1.76	10.9	0	7	2
2	8345	8.1	0.34	0.28	9.1	0.04	91	230	1.004	3.14	0.63	15.1	-1	9	1
5	8352	6.4	-1.29	-0.82	60.5	0.041	18	126	1.034	3.43	0.42	24.1	0	7	3
4	8358	0.5	-0.76	0.29	-24	0.046	-49	107	0.9912	3.15	0.67	6.3	0	8	2
2	8359	3.5	0.655	1.68	6.1	0.50898	110	175	1.001	2.26	0.97	9.3	-1	10	1
2	8360	16	-0.4	1.87	65.7	0.036	38	195	0.9908	3.35	0.57	15.1	-1	7	1
4	8365	6	0.34	1.5	5.4	0.06	23	-220	0.9602	3.25	0.44	10.68	-1	7	2
4	8366	5.8	-0.15	0.31	7.5	0.307	-12	-166	0.9949	3.19	3.3	9.8	-1	6	2
5	8369	14.5	0.51	0.58	-42.2	0.049	481	135	0.9933	2.8	0.51	9.846	1	9	3
4	8373	5.9	0.89	0.28	3.2	0.035	150	117	1.028	3.366	0.42	13.6	1	6	3
4	8378	5.6	-0.38	0.26	4.3	0.518	-66	97	1.035	4.21	0.46	9.2	0	6	2
4	8392	7.6	0.74	0.29	19.3	0.169	36	493	1.03	3.14	0.5	9	-1	7	2
4	8397	6.8	0.87	0.71	-103.5	-0.313	187	44	0.9978	3.27	-0.2	9.5	-1	8	2
2	8399	7.9	-0.25	0.42	-32.4	0.086	8	35							

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	8543	4.7	0.7	2.65	-47.9	0.056	56	502	0.9898	3.17	0.44	8.8	0	7	1
6	8554	7.9	0.29	-0.41	6.7	0.036	97	117	0.9611	3.12	0.42	16.2	1	9	4
5	8560	6	0.2	0.26	6.8	0.626	-133	93	0.9483	2.17	0.42	11.41	0	6	4
5	8561	-3.4	0.32	0.35	31.3	-0.551	-78	421	0.9912	3.36	1.22	6.1	-1	7	4
4	8563	5.2	1.51	-0.68	5.8	0.52	9	74	1.016	3.28	0.53	7.2	-1	7	2
4	8566	7.2	0.26	-0.29	1.095	0.404	-15	114	0.9966	3.23	0.9	10.5	0	8	2
4	8570	6.2	-0.41	0.25	44.1	0.301	114	105	0.9912	2.08	-0.11	11.1	0	7	2
5	8572	5.5	0.82	0.32	5.8	0.051	20	100	0.9959	3.17	0.49	11.2	-1	7	3
2	8582	14.7	1.15	0.63	2.3	-0.329	295	435	1	3.16	2.02	9.5	-1	13	1
2	8583	4.4	-0.31	0.21	1	-0.161	67	313	1.026	3.14	-2.55	11.8	-1	7	1
2	8587	5.9	3.15	0.05	-57.1	0.054	36	414	1.029	3.43	-0.83	9.2	0	6	1
2	8592	0.6	1.48	1.69	-2.4	-0.054	90	-287	1.026	4.2	-1.03	11.9	-1	9	1
6	8593	5.9	0.33	0.32	8.1	0.202	9	34	0.9592	4.27	0.36	16.6	1	7	4
2	8607	8.9	0.49	0.02	2.7	-0.389	-70	34	0.9461	4.34	1.89	9.2	-1	8	1
4	8609	-2.3	0.45	0.32	29.7	0.031	28	185	0.9589	3.31	0.61	9.4	1	7	2
4	8610	8	-0.28	1.04	2.3	0.042	42.2	208	1.028	3.29	1.23	12	0	9	2
4	8614	5.6	1.24	0.5	44.7	0.029	25	93	0.9753	2.57	0.4833	15.6	0	6	2
5	8616	7.9	0.16	0.41	66	0.297	119	140	1.036	4.1	1.64	12.5	0	8	4
5	8622	7.1	1.14	-0.5	1.5	-0.323	26	384	1.022	3.3	-0.85	10.8	-1	8	4
4	8623	5.9	0.73	0	7.4	0.077	550	44	0.9939	3.5	0.53	11.2	0	6	2
2	8624	0.4	-0.25	0.28	70.1	0.31	86	213	0.9962	3.16	2.22	9.9	-1	7	1
5	8633	6.9	0.47	0.3	9.6	0.237	50	185	0.9939	3.39	-0.61	9.6	1	7	4
5	8641	-0.6	-2.48	0.33	-68	0.266	-53	54	0.9906	3.56	0.7298	10.9	2	8	3
5	8644	7	0.28	-1.24	-49.5	-0.248	-35	179	0.9913	3.166	0.52	9	1	8	4
4	8649	6.5	0.4	0.37	8.9	0.053	36	148	1.031	3.17	0.64	9.3	1	8	2
2	8653	6.9	0.19	0.39	98.5	0.028	144	84	0.994	3.11	0.66	10.8	0	7	1
5	8657	5.6	0.26	1.35	1	0.032	27	96	0.9475	3.18	0.44	18.3	2	7	3
2	8658	18.3	0.4	0.02	8.9	0.053	-165	148	0.9572	3.16	-0.14	11.5	0	8	1
4	8663	-2.4	1.83	1.93	8.9	0.043	31	-57	0.9964	3.22	1.66	9.2	0	8	2
2	8672	9.7	-0.79	0.17	-24.2	0.049	-206	-20	1.006	1.84	2.9	13.6	-1	10	1
2	8680	10	-0.53	0.42	30.4	0.056	-203	393	0.9968	3.11	1.21	15.1	-1	11	1
2	8684	9.2	0.34	-0.89	25	0.256	147	168	0.9982	3.39	2.03	8.7	0	8	1
2	8687	6.2	0.94	0.95	1.6	-0.02	-136	92	1.025	2.04	0.5	10.5	0	7	1
4	8688	10.7	-2.35	0.66	41	0.046	26	164	0.9979	4.04	-1.11	8.8	0	7	2
4	8690	6.6	0.22	0.58	-105.9	0.133	52	136	0.9879	3.23	0.3	7.5	0	7	2
4	8712	21.5	0.39	-0.78	2.3	0.235	6	427	1.046	3.16	0.49	9.5	1	13	2
2	8717	6.1	0.2	0.34	50.3	0.004	-173	201	0.995	3.35	1.93	10.1	1	7	1
5	8730	7.3	0.205	0.31	1.7	-0.344	34	110	1.093	2.7	0.69	11	1	8	3
4	8739	7.2	0.2	0.22	1.6	0.531	-205	101	1.041	2.26	-1.18	15.2	0	8	2
4	8744	-2.4	0.975	0.33	9.2	0.058	-151	5	0.9983	2.42	1.77	9.9	1	7	2
5	8747	6.4	0.18	0.74	11.9	0.046	283	168	0.9799	3.08	0.03	14.3	1	7	3
5	8748	14	-0.6	0.35	11.6	0.048	44	-147	0.9944	3.29	1.95	10.5	0	7	3
3	8751	7.4	0.19	-0.35	12.8	0.053	522.5	436	0.9861	3.14	1.76	2.5	-1	8	2
4	8758	-1.7	1.78	0.49	46.4	0.031	-173	99	1.038	3.18	-0.64	13.6	0	8	2
4	8761	6	-0.8	0.15	0.9	0.033	9	101.4	0.9696	3.24	2.01	12.1	-1	7	2
5	8763	6.5	0.46	0.24	49.6	-0.678	56	104	1.022	3.08	-0.73	10.47	1	7	3
4	8764	7.1	-1.91	0.04	14.4	-0.783	205	437	0.9986	3.425	2.15	15.2	0	8	2
5	8765	-0.2	0.36	-0.97	52.05	0.342	-37	96	0.9155	4.18	0.62	11	2	7	3
5	8773	11.8	1.04	0.36	106.4	0.03502	28	156	0.991	3.62	-0.62	10.36	0	8	4
2	8780	1.9	1.03	0.47	8.4	0.042	167	156	0.9856	3.15	0.93	16	0	8	1
4	8781	1	1.61	0.33	-25.8	-0.29	71	162	0.9914	3.07	0.19	11	-1	8	2
4	8782	6	1.63	-0.08	-43.9	0.063	19.79	134	1.011	2.63	0.57	4.9	0	7	2
2	8785	12.4	1.88	0.58	22	0.103	28	45	1.001	4.1	1.16	6.9	0	13	1
2	8786	9.4	1.21	3.16	2	0.23	25	48	0.9856	3.57	0.4626	9.7	1	10	1
2	8787	0.9	1.38	1.37	70.3	-1.01	194	133	0.9978	3.17	0.36	8.7	-1	8	1
4	8799	-4.6	1.13	0.35	63.1	-0.399	29	198	0.9984	3.24	0.5	3.8	0	7	3
2	8807	6.3	0.775	2.55	-12.8	-0.283	48.76	86	0.9959	3.23	-0.17	3.6	-1	9	1
4	8816	8	1.98	-3.02	4	0.476	78.64	554	0.9905	1.79	1.36	14	0	9	2
4	8817	7.1	-0.48	0.31	70	0.053	0	78	0.9955	3.31	0.59	5.1	-1	8	3
5	8826	6.7	0.06	-1.24	-30.1	0.003	-144	399	0.9616	3.12	0.4669	11.2	1	7	3
2	8833	-7.7	-0.9	0.33	1	0.054	158	164	1.013	3.62	0.51	11.9	0	7	1
2	8834	6	0.26	0.54	1.3	0.08128	-55	154	0.9935	3.88	0.51	4.2	0	6	1
2	8835	9.4	-0.56	0.41	99.6	0.045	68	183	0.9992	4.4	0.4195	9.4	-1	8	1
5	8840	6.7	0.75	1.69	14.8	0.186	44	436	0.9968	3.2	1.44	9.8	1	7	3
2	8843	0.5	0.36	0.11	14.3	0.134	55	349	0.9979	1.53	0.44	9	1	8	1
4	8849	-3.6	0.17	0.04	-43.8	0.037	-105	133	0.9931	2.3	1.73	10.8	-1	7	2
5	8855	6	0.28	0.55	5	0.078	-217	139	1.042	3.1	-0.34	9.5	1	7	1
2	8861	6.4	0.31	1.19	6.9	0.335	-84	187	0.9937	2.99	0.34	12.2	0	10	1
5	8862	9.3	0.38	-0.48	3.8	0.132	3	11	0.9958	0.92	0.57	10.1	0	10	3
5	8865	1.6	1.5	0.41	14.2	0.361	197	187.7	0.9968	2.26	0.5	10.3	-2	7	3
5	8868	6.5	0.19	0.56	0.8	0.043	-168	205	0.9936	4.07	0.39	11.2	0	7	4
4	8870	14	0.51	1.34	1.2	0.04	-70	455	0.9676	3.05	0.29	10.8	1	8	2
3	8880	-2	0.2	0.25	15	0.1166	5	259	0.9529	3.12	0.53	2.8	1	7	2
2	8885	8.2	0.67	0	1.9	0.08	-185	443	0.9556	3.4	0.32	4.2	0	7	1
5	8894	15.6	-0.57	0.34	-0.2	0.054	466	606	0.9693	3.42	0.58	10.4	0	7	3
5	8895	1.9	-0.68	0.31	61.5	0.038	8	79	0.9756	4.12	0.39	10.5	0	6	3
5	8899	6.8	0.15	-1.09	12.9	-0.378	68.5	486	0.9701	2.95	-0.35	16.3	0	7	3
4	8912	6.4	-0.56	0.44	-12.5	0.482	49	179	0.9094	3.26	-0.79	9.2	0	7	2
2	8922	7	-0.79	1.57	-44.2	0.394	46	89	0.9839	3.39	-0.2	10.7	-1	7	1
4	8924	17.7	-0.31	0.8	-2.6	0.039	13	134	0.9731	2.02	0.49	10.9	-1	7	2
4	8928	5.2	-0.97	1.13	16.2	0.027	158	117	0.9889	6.04	0.45	13.2	0	6	2
5	8932	12.8	0.3	0.49	12.3	0.049	50	144	0.9971	3.09	0.57	10.2	1		

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
6	9044	13.4	0.3	0.33	2.7	0.044	34	108	1.014	3.86	0.18	16.4	1	8	4
2	9045	11.9	-0.46	0.34	1.6	-0.345	-61	270	0.942	3.34	0.563	8.5	0	7	1
2	9047	8.1	1.47	0.79	-21.6	-0.225	114	205	1.077	3.36	0.88	11	0	9	1
2	9049	6.6	0.5	0.04	2.1	0.07874	6	-560	0.9955	3.39	0.64	9.4	0	7	1
4	9061	-2.2	-1.25	1.28	38.4	0.44	-171	409	0.9917	2.62	-1.14	8.2	0	7	2
2	9062	7.3	0.25	-0.38	25.3	-0.394	38	-212	1.028	3.4	1.57	9.6	0	8	1
4	9076	7.4	0.29	0.4	-30.6	-0.327	-201	352	0.9932	2.57	0.76	12.3	0	8	2
2	9079	-2.7	0.9	-0.88	27.1	0.52	-26	28	0.9865	3.13	-0.92	10.6	-1	6	1
4	9081	6.5	-0.705	1.15	-11.1	0.041	88	126	0.9949	2.97	-0.17	20.3	0	7	2
4	9082	11.2	2.48	0.41	28.5	0.47	44	139	0.9956	3.09	0.37	5.5	1	7	2
2	9089	4	0.25	0.7	-31.5	-0.004	165	-188	1.038	3.13	0.22	4.7	-1	10	1
4	9092	7.5	0.19	-1.23	7.1	0.056	50	110	1.003	3.06	0.71	9.9	-1	8	2
4	9094	6.5	0.28	0.26	37.6	-0.254	44	139	1.018	3.32	0.2405	10.2	1	7	2
2	9115	7.1	0.34	1.02	115	0.082	31	68	0.9969	3.45	3.46	6.8	0	8	1
5	9117	8.2	3.32	0.21	57.7	0.593	-100	131	0.9902	3.26	0.55	13	0	7	3
2	9118	6.1	-1.04	-1.33	2.5	0.186	131	218.5	0.9935	3.46	-0.94	13.9	0	7	1
4	9120	6.1	-1.17	0.49	7.6	0.511	77	39	0.9667	4.08	0.47	8.9	-1	7	2
2	9124	7.3	1.44	0.43	1.7	0.01297	21	123	0.9905	3.19	0.42	9.4	0	8	1
2	9128	7.7	0.14	-0.74	60	0.09844	-64	213	0.9714	3.18	2.05	9.2	-2	8	1
4	9135	2.3	1.19	0.08	47.2	-0.251	152	32	0.9678	4.36	1.06	15.8	0	8	2
2	9136	23.8	0.35	0.44	6.5	0.056	31	6	1.01	3.25	1.33	12.9	0	8	1
5	9138	5.8	1.59	0.34	9.7	0.035	26	453	0.9972	3.08	0.49	10.4	0	8	3
4	9157	6.7	0.21	0.36	-91.85	0.02	59	-221	1.029	3.5	0.4695	2.9	0	7	3
2	9176	9	0.15	0.3	5.3	0.765	-10	127	0.9942	2.51	-0.58	16.3	0	7	1
2	9183	0.6	0.32	-1.47	17.75	0.06	207	190	1.032	1.68	1.16	3.5	0	7	1
2	9187	9.2	-0.37	-1.15	7.6	0.08	54	184	0.9957	2.05	-1.33	10.8	0	7	1
2	9188	7.5	0.18	0.99	-24.8	0.543	24	400	0.9737	3.19	0.08	9.5	-1	8	1
5	9190	6.5	0.29	0.05	3	0.273	70	93	0.9906	3.83	3.55	23.7	0	7	3
4	9197	15.6	0.3	0.5	1.1	0.036	174	-153	0.9497	4.33	0.6034	11.3	0	6	2
5	9200	7.3	0.19	0.27	13.9	0.057	45	155	0.9456	2.94	1.67	8.8	-1	8	3
2	9201	17.1	0.7	0.34	46.4	0.468	299	161	0.9004	3.32	0.62	6.9	0	7	1
4	9203	0.5	0.23	-0.97	1.3	-0.112	14	-98	0.9928	4.62	0.37	16.1	0	7	2
4	9212	-1.8	0.38	0.29	50.5	0.039	25	293	0.966	3.25	0.59	9.3	0	8	2
4	9213	5.8	0.3	0.42	1.1	0.036	-527	113	0.9887	3.247	0.46	18.7	-1	7	2
5	9214	5.7	0.8	2.09	51.8	-0.432	49	138.5	0.9394	3.26	0.25	13.1	0	6	3
2	9217	4.5	0.46	-0.61	58.2	0.343	-120	52	0.9987	3.11	1.81	9	1	8	1
2	9219	29.2	0.31	0.09	13.6	-0.449	513	321	0.9946	3.73	-0.18	0.4	1	7	1
4	9220	15.1	0.695	0.06	-22.8	0.076	144	20	0.8955	2.17	0.54	6.6	1	8	3
6	9221	-3.9	-0.71	0.28	12.4	0.62	-113	-182	1.02	3.16	0.51	14.8	1	7	4
4	9237	6.5	0.14	0.25	24.7	0.336	15	262	0.9526	1.96	0.43	4.7	0	5	2
4	9240	16.5	0.24	0.34	21.4	-0.316	3	-312	1.005	2.4	1.72	11.4	1	8	2
2	9241	2.9	-0.77	0.33	10.2	0.048	194	141	0.9529	3.16	-0.72	10.74	-1	9	1
4	9248	6.4	-1.13	0.26	8.2	0.795	47	596	0.9947	3.17	0.5	15.4	-1	7	2
5	9253	2.3	0.2	-0.85	58.5	-0.344	32	-22	0.9779	1.25	0.46	11.5	2	8	4
4	9259	7.2	-1.19	-0.94	75.05	0.038	71	130	1.023	2.97	0.47	9	1	8	2
4	9267	17.6	1.995	0.27	65.05	-0.463	92	70	0.9899	4.08	0.47	12.15	1	6	2
2	9271	7.2	0.58	0.5	8.4	0.077	-169	28	0.9849	4.01	-0.87	9.4	0	8	1
4	9273	13.4	2.6	-0.82	-29.8	-0.033	46	73	1.032	2.34	0.34	11.51	-1	8	2
5	9285	6.6	1.52	-0.34	1.8	0.042	26	38	0.9794	3.19	-1.88	12.74	1	7	4
4	9290	5.1	2.04	-0.65	10.2	0.559	18	281	0.9913	4.13	0.8055	11	0	6	2
4	9291	10.3	-0.3	1.8	1.4	-0.305	5	33	0.9566	3.95	0.39	11.6	0	11	2
4	9293	17.4	0.49	0.69	6.65	0.034	244	158	0.9934	2.77	0.48	11.2	0	9	2
4	9294	1	-0.52	0.39	28.2	-0.266	241	461	0.9976	2.9	0.46	4.8	0	8	2
4	9301	10.6	0.17	0.28	1.2	0.046	-135	574	0.9121	3.33	-0.52	10.1	-1	7	2
5	9302	8.6	0.2	0.42	-47.8	-0.073	35	125.5	0.9925	2.98	0.49	10.65	0	9	3
2	9312	8	-0.39	0.43	12.07	0.067	-160	-225	1.008	3.38	1.56	11.9	0	9	1
4	9316	-3	0.92	-0.92	-50.8	-0.023	-185	-124	0.9936	3.03	-0.53	10.15	0	7	2
4	9319	2.4	1.06	-0.93	9.3	0.041	70	189	1.008	3.57	0.49	8.6	1	8	2
5	9328	8.6	0.48	0.5	14.5	0.361	-97	-170	0.9983	4.22	1.1	9.1	1	8	3
4	9331	9.3	0.775	0.43	28.4	0.045	24	56	0.9984	3.31	2.26	7.8	1	10	2
1	9338	21.8	-0.59	-1.05	3.5	0.094	9	-186	1.023	3.29	0.53	-0.7	-1	11	1
2	9350	12.1	1.16	0.25	7.8	0.05	13	68	0.9483	2.91	0.4	10.69	0	7	1
4	9356	16.1	1.26	-0.58	33.8	-0.218	325	-273	0.9966	3.83	1.92	9.5	0	7	2
2	9359	-10.8	0.65	0.1	2.9	-0.378	17	263	1.088	3.88	0.55	7.9	-1	9	1
2	9362	-0.9	0.49	1.2	63.7	0.176	232	338	0.9532	3.24	0.68	9	1	7	1
2	9364	7.2	-0.76	-0.63	67.9	0.043	226	-35	0.9463	3.09	1.93	11.41	0	8	1
2	9370	-0.1	-0.82	0.07	-126.2	0.041	-21	-234	0.9482	3.14	1.46	3.1	1	7	1
4	9380	18.8	1.5	-0.75	4.6	0.45	-89	-143	0.9856	4.06	1.95	10.6	-1	8	2
4	9386	5.9	-1.12	0.6	2	0.407	-197	92	0.9715	3.39	0.6377	8.3	1	6	2
2	9394	-4.1	0.24	0.29	2	-0.181	15	-346	1.04	3.23	2.99	5.9	0	7	1
4	9407	-3	0.26	0.28	74.4	0.028	13	-107	0.9653	3.09	0.34	12.1	0	7	2
2	9411	7.2	-2.03	0.63	11	-0.295	529	-262	0.9974	3.09	-0.76	12.5	0	8	1
3	9422	1.2	-0.42	0.21	-35.9	-0.236	8	62	0.997	3	0.58	2.8	0	8	2
2	9423	17.5	1.695	-1.18	-7.4	0.073	569	60	1.043	4.18	0.98	15.2	0	9	1
4	9429	7.4	-0.42	-0.44	-10.6	0.312	151	415	0.9991	2.92	0.68	14.1	0	8	2
2	9433	8.4	0.2	-1	11.49	0.332	-85	31	0.9942	3.36	0.45	13.7	-1	9	1
2	9439	2.4	0.915	0	53.6	0.435	17	-179	1.041	3.68	0.73	11.4	0	7	1
5	9451	7.1	0.16	0.67	15	0.045	49	155	0.9771	2.78	1.63	8.7	0	8	3
2	9452	8.8	1.19	-1.1	1.9	0.069	36	372	0.9939	3.38	4.18	16.4	1	7	1
2	9453	7.8	0.24	-0.29	48.5	0.037	274	480	0.9932	3.08	0.3779	11.6	-1	7	1
5	9460	5.7	1.68	0.62	7.5	0.038	27.69	128.4	0.986	1.02	-1.79	13.4	1	8	3
4	9465	-4.3	-0.34	0.38	70.1	0.126	49	9							

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	9588	5.7	-0.09	0.28	2.2	0.019	-448	168	1.033	2.72	-0.35	15.1	1	6	3
4	9591	-1.1	1.64	-0.98	22.95	-0.496	-141	-123	0.9913	3.15	0.8	12.7	0	7	2
5	9592	13.7	-0.93	-0.15	1.7	-0.188	98	-212	1.043	3.37	0.6164	9.697	0	7	3
5	9597	1.1	0.23	-0.09	-6.2	-0.27	31	161	0.9724	3.19	0.42	12.15	2	6	3
5	9600	7.5	0.97	0.3	4.6	1.123	145	61	1.022	3.15	0.38	14.6	0	8	3
4	9603	8.1	-1.12	0.4	6.3	0.047	-191	85.62	0.9957	3.18	0.53	6.6	0	8	2
2	9605	-5.3	0.21	0.36	17.3	-0.049	-16	113	0.9628	3.64	1.4	16.6	-1	7	1
2	9614	7.2	1.54	-0.14	-11.2	0.05	60	-245	0.9945	3.46	0.8353	10.2	0	8	1
5	9616	-3	-1.2	0.35	-56.2	0.434	30.68	165	0.9932	3.04	-1.2	8.6	1	10	3
4	9622	7	0.28	0.28	1.4	-0.498	145	83	0.971	2.87	0.58	11.1	0	8	2
5	9624	8.5	0.25	-0.54	2.8	0.032	-45	-171	0.9955	3.06	0.44	12.8	0	9	3
4	9629	5.7	2.31	-0.08	1.5	0.172	7	19	0.994	3.5	0.48	9.8	0	7	2
4	9633	6.8	-0.75	0.25	7.95	0.042	56.28	11	1.007	3.44	0.61	13.4	0	6	2
5	9640	5.3	-0.97	0.72	56.7	0.03	35	115	0.9867	2.93	0.42	11.8	0	9	3
2	9644	33.5	-0.61	0.24	2.4	1.165	6	-359	0.8971	3.09	0.57	9.4	-1	11	1
4	9645	6.8	2.95	0	1.8	0.066	-11	-371	0.9976	3.62	0.68	12.5	0	8	2
2	9646	6.9	-1.13	-0.54	53	0.039	8	143	0.9601	0.86	2.16	9.8	0	8	1
2	9648	6.6	0.96	0.46	-9.5	0.056	231	482	0.9968	3.5	0.6	9.9	0	7	1
2	9649	3.5	-0.67	-1.1	-15.8	-0.297	174	139	0.9979	3.21	1.02	4.3	-1	10	1
4	9660	7.5	0.23	0.21	3.8	0.409	21	-178	1.041	4.26	0.57	11	0	6	2
4	9664	15.9	0.87	1.38	2.1	0.534	5	-341	0.998	2.99	0.6714	7.2	1	13	2
2	9675	7	0.45	0.52	19.8	0.05973	12	96.88	0.9976	3.07	0.4742	13.9	1	8	1
2	9679	6.8	-0.41	1.52	2.4	0.046	27	132	0.991	4.53	0.73	11.3	0	6	1
4	9680	6	2.47	-0.44	0.9	0.038	-115	72	0.9907	3.23	-1.19	24.3	-1	7	2
4	9682	7.1	0.62	0.06	-29	0.307	48.1	-208	1.018	3.32	0.85	16.5	0	8	2
2	9697	6.4	-0.11	0.44	-21.7	0.29	52	-103	0.9556	2.08	0.48	0.7	0	7	1
5	9701	9.3	-0.16	-0.25	3.217	0.172	24	482	0.9932	3.27	0.39	12.2	-1	7	3
4	9704	-0.7	0.64	0	-110.4	0.604	18	23	1.012	3.32	0.6	11.7	-1	8	2
5	9705	6.2	-1.67	0.45	10.4	-0.063	22	27	0.9971	3.14	0.56	9.8	1	7	3
5	9707	18.4	0.2	-0.3	1.7	0.192	-29	167	0.9778	3.05	1.36	8.8	0	9	3
5	9714	6.6	0.8	0.03	-91.1	0.079	-104	-207	0.9963	3.89	0.5	12.2	1	7	4
2	9718	8.3	-1.24	1.52	31.7	0.033	-157	57	0.9911	3.42	0.51	10.73	0	9	1
5	9722	6.2	0.36	-1.22	3.2	-0.471	221	-141	0.9559	1.9	0.36	9.9	1	7	3
2	9739	-2.8	1.2	-0.9	46.9	-0.132	-184	131	0.9936	3.85	0.64	10.83	0	7	1
5	9747	4.9	1.62	1.65	-122.7	0.28	-93	158	0.9894	5.28	-0.38	12.6	1	7	4
2	9751	5.9	0.37	0.14	-35.3	-0.339	34	185	0.9944	3.17	0.63	18.6	-1	6	1
2	9757	8.1	0.82	0.27	4.3	0.03	43	279	0.9921	3.16	0.25	11.2	-1	9	1
5	9759	1.7	1.22	0.15	-41	0.266	29	478	0.9702	3.29	0.77	13.4	-1	6	3
5	9760	6.3	1.11	1.3	3.5	0.08989	23	109	1.041	2.96	0.54	7.4	0	7	3
4	9764	7.6	1.64	0.36	4.5	0.563	-504	50	1.038	3.09	0.47	5.6	-1	8	2
2	9776	10	0.22	0.43	61.6	-0.252	-60	503	0.958	4.33	0.4809	13.7	0	8	1
2	9778	-5	0.18	1.14	2.442	0.048	-155	339	0.9956	3.77	-1.07	10	0	7	1
2	9786	12.8	0.635	-0.03	-45.6	-0.342	-248	-76	1.04	3.31	0.57	8.1	-1	9	1
3	9803	7.5	-1.68	1.67	-52.9	0.077	11	35	1.004	3.36	1.75	1.3	0	8	2
4	9804	9.1	0.14	0.35	-15.9	0.383	16.58	-183	1.025	4.17	0.35	16.4	1	7	2
5	9815	-0.4	0.2	0.07	2.5	-0.237	15	25	0.9957	2.32	1.15	13.5	1	8	3
2	9824	11.2	0.01	0.3	1.8	0.624	16	113.5	0.9286	4.3	0.82	10.1	-2	8	1
4	9825	10.4	0.34	0.58	-55.6	0.174	6	16	0.997	4.46	0.7	14.5	0	11	2
2	9826	16.3	0.405	0.15	1.45	0.453	-137	387	0.9912	3.52	0.42	11.6	0	6	1
4	9827	7	0.18	0.26	1.4	0.044	304	89	0.9728	2.71	0.48	10.7	0	7	2
4	9833	6.7	3.26	0.31	9.9	0.04	10	453	0.9452	2.33	1.46	7.9	0	7	2
2	9835	8.2	2.49	0.64	-38.2	0.043	22	47	0.9987	2.23	1.55	8.8	-1	9	1
4	9860	17.3	0.34	0.32	3.8	0.044	278	116	1.021	3.39	0.44	11.8	0	7	2
2	9865	7.2	1.54	1.53	6.7	-0.397	120	138	0.9939	3.2	1.24	15.4	1	8	1
5	9871	6.6	-2.49	1.52	18.15	0.042	437	-221	1.034	2.62	2.13	8.7	1	7	3
4	9874	9.9	0.88	0.02	1.5	0.8	38	157	1.019	3.206	1.15	14.2	-1	7	2
2	9880	18.6	1.38	1.09	57.2	-0.072	-95	108	0.9928	3.13	1.15	11.5	1	9	1
4	9882	7.5	-1.21	0.24	-8.1	0.053	8	117.8	1.014	3.14	0.5	7.7	-1	8	2
2	9885	5.8	0.28	0.29	-23.6	0.026	31	114	1.017	2.79	0.6	9.7	0	6	1
3	9888	14.1	-0.125	-0.1	20.3	0.04	57	-172	1.035	3.22	0.54	3.2	1	7	2
1	9892	6.3	0.17	0.23	-59.5	0.045	-20	147	0.9877	3.08	-0.92	-1.1	-2	7	1
5	9893	-3.3	0.47	-0.38	6.4	0.581	-118	-66	0.9857	3.29	0.52	10	1	7	3
4	9895	7.1	1.8	0.39	13.7	-0.144	151	477	0.9976	2.9	0.46	8.5	-1	8	2
2	9902	4.1	1.52	1.29	2	0.05	23	363	0.992	3.73	0.37	10.4	1	7	1
4	9906	6.4	0.53	1.06	-11.3	0.034	460	90	0.9886	2.9	-1.14	12.6	0	7	2
5	9910	7.8	0.23	0.32	10.7	-0.425	26	183	0.9554	2.93	1.09	9.1	1	9	3
5	9914	-18.2	-0.405	-0.92	1.9	0.036	-536	324	0.9917	2.28	0.91	14	1	5	3
5	9918	6	0.36	0.04	32.4	0.624	189	203	0.988	0.74	0.62	9.8	1	7	3
4	9920	6.6	0.78	0.5	34.5	0.645	183	-70	0.9458	3.25	0.48	18.5	-1	8	2
4	9926	4.9	0.23	1.52	-9.5	-0.391	3	8	0.9981	3.08	0.7	10.7	2	12	2
5	9931	9.7	0.1	0.37	57	0.593	-238	202	0.9909	3.19	1.42	12.4	2	8	3
4	9935	-5.2	-0.08	0.01	-59.2	0.441	18	30	0.9903	3.2	2.29	13.7	0	7	2
4	9945	7.9	-0.87	-0.65	145.4	0.072	44	-200	1.021	3.03	1.85	16.9	1	8	2
5	9953	6.3	0.51	0.74	2.3	0.216	29	225	0.9517	3.17	0.75	11	1	7	3
2	9957	-0.7	0.57	0.21	1.5	0.09799	255	785	0.9842	3.16	0.54	9.8	0	8	1
4	9963	17.6	0.35	0.28	-5.2	-0.161	26	104.9	0.9767	1.99	0.3976	7.5	1	8	2
4	9972	7.2	1.03	-1.67	1.8	0.567	218	70	0.9539	3.42	0.59	15	1	8	2
5	9976	12.2	-0.97	0	6.5	0.51	47.7	315	0.9939	4.43	2.33	11.6	0	5	3
2	9979	7.7	0.39	-0.04	3.3	0.037	29	224	1.007	3.83	0.4244	11	0	8	1
2	9980	8.2	1.47	0.43	8	0.026	18	385	0.9885	3.22	0.79	17.2	0	7	1
5	9982	-1	0.17	0.32	1.6	0.00451	17.07	450	0.9948	3.24	0.76	13.8	1	8	3
4	9991	-4	-1.26	0.4	-44.7	0.066	9	108	0.9379</						

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS	
4	10121	14.4	0.18	0.34	15.7	0.369	194	422	0.99	4.5	0.45	6.4	-1	7	3	
4	10124	8.4	0.65	0.02	2.1	0.078	-547	-290	0.955	3.35	0.15	4.6	1	7	3	
5	10126	3.1	0.28	-0.82	7.7	0.349	-32	116	1.013	2.99	0.38	3.6	1	8	4	
1	10127	6.4	0.34	0.2	-72.8	-0.459	-115	449	1.011	3.13	-0.34	-2	1	7	1	
2	10145	5.6	0.185	-1.12	22.5	-0.268	28	361	0.975	3.55	-0.38	10.3	0	6	1	
3	10147	7.9	0.17	-1.07	1.6	0.283	-113	150	1.023	2.81	0.63	-3.6	-1	8	2	
2	10148	-4.6	-0.415	1.15	6.15	0.567	23	87	1.028	2.94	1.45	11.4	-1	7	1	
2	10162	17.9	0.28	0.48	2.1	-0.433	-14.67	-286	1.021	3.26	0.62	6.7	-1	9	1	
2	10163	1.8	0.18	0.3	5.731	0.09	-145	-171	0.9941	3.03	0.38	9.4	0	8	1	
2	10166	18.3	0.25	-0.03	36	0.183	41	161	0.9586	3.16	0.5	13	-2	7	1	
4	10172	7.2	0.46	0.36	-8.3	0.051	26	-130	0.9914	2.93	1.59	8.1	0	8	2	
2	10173	6.8	0.54	-0.52	4	0.348	-541	134	0.9633	4.53	-0.65	9.7	0	9	1	
2	10175	19.1	-1.04	1.61	72.2	-0.216	64	179	1.02	4.84	2.67	12.1	-1	9	1	
4	10180	12.9	-0.15	1.38	-50	1.041	3.295	121	0.9901	0.9	0.1996	20.4	-1	7	2	
4	10186	7	0.19	0.33	6.3	0.069	42	-47	0.9918	3.31	0.03	5.5	1	8	3	
5	10192	18.3	0.1	0.45	13	-0.204	259	451	0.9974	3.47	0.46	12.8	-1	7	3	
4	10199	5.7	1.5	0.65	7.1	0.628	-392	154	1.008	3.3	0.83	5.8	-1	6	2	
4	10209	10.9	1.75	2.02	32.6	0.071	17	440	0.9993	3.05	-0.08	12.8	0	12	2	
6	10210	6	-0.22	0.41	13.2	0.578	37	54	0.9916	3.39	0.51	18	2	7	4	
4	10214	0.7	0.37	0.58	55	0.644	105	466	0.9971	3.22	0.464	8.6	0	12	2	
5	10215	-2.6	0.715	0.24	65.5	0.07	27.75	39	0.9966	3.73	-0.15	20.4	1	10	3	
2	10216	0.7	0.29	1.69	13.6	0.07	74	261	0.9977	2.79	0.5944	9.6	0	8	1	
2	10232	9.6	0.56	-0.95	77.3	-0.488	-46	106	0.994	3.75	-0.1	13.6	1	9	1	
5	10239	6.9	2.59	0.92	-16.2	0.018	177	61	0.9929	3.28	1.93	12.7	1	8	3	
4	10249	25.5	-2.27	0.25	1.4	-0.464	30	-170	0.9879	4.34	0.54	11.7	1	7	2	
5	10253	14	0.37	1.44	-2.2	0.035	-78	116	0.993	2.68	0.1	12.6	1	7	3	
4	10255	-5.2	-0.39	0.32	13.2	-0.033	-167	221	1.007	3.27	2.29	9.6	0	8	2	
4	10262	16.2	0.37	-0.08	2.85	0.004	5	24	0.9794	3.19	0.7102	11.9	-1	9	2	
1	10264	8.9	0.62	0.38	102.3	0.348	19	102	0.977	3.17	0.35	-2.6	-1	7	1	
5	10266	18.7	0.63	0.39	-8.5	0.054	23	104	0.9941	3.27	0.45	10.3	1	8	3	
2	10268	6.1	-0.73	0.48	11.5	-0.115	-108	94	0.9978	3.12	0.45	0.8	0	7	1	
4	10271	-0.6	0.24	1.08	-55.2	0.032	42	104	0.9774	2.31	-1.02	7.5	-1	8	2	
5	10272	6.1	0.21	-1.24	1.5	0.085	37	253	0.9897	3.5	0.31	17.8	1	7	3	
2	10276	-1.1	0.43	3.2	5.5	0.071	-189	17	0.9513	3.42	0.43	16.3	0	8	1	
2	10277	33	0.16	1.83	2	0.044	77	107	0.9951	3.21	0.13	11.6	0	10	1	
4	10279	15.4	1.01	0.24	67.2	0.079	19	911	0.9991	3.18	0.56	10.1	-1	11	2	
2	10281	4.5	1.91	1.56	4.9	-0.392	-23	18	0.9783	1.78	0.54	10	-1	10	1	
2	10285	7.2	0.29	1.42	2.5	-1.035	16	-322	1.002	3.44	0.4556	9.3	-1	8	1	
2	10294	5.7	1.88	-0.18	10.1	0.024	-255	481	1.014	3.2	0.4	9.2	-1	8	1	
4	10300	8.4	-0.6	0.38	51.2	0.463	51	170	1	2.9	0.82	8.9	-1	9	2	
2	10304	4.9	0.345	1.93	1	0.088	-16	445	0.992	4.02	1.06	3.5	0	6	1	
2	10307	14.8	1.32	0.86	20.6	0.037	399	-250	0.9424	3.64	0.6098	8.7	1	8	1	
5	10309	6	0.27	0.15	-44.9	0.233	35	-538	0.9936	2.15	1.27	8.3	1	6	3	
4	10310	6.1	0.41	0.14	39.9	0.037	144	119	1.009	3.38	-0.67	7.5	0	7	2	
3	10312	20.1	1.55	0.24	2.3	-0.533	36.01	28	0.9969	2.6	0.53	4	0	9	2	
4	10321	-0.4	-0.72	1.37	11.7	0.478	43	133	0.9588	3.02	0.41	8.8	-1	7	2	
4	10322	-6.3	0.54	1.87	2.5	0.097	7	-240	1.005	2.83	2.13	9.3	1	10	2	
4	10336	4.1	0.41	-1	10.1	0.306	28	232	0.9968	3.2	0.95	7	0	8	2	
2	10368	1.4	0.57	1.76	0.9225	0.027	35	138	0.9895	2.88	0.2	0.2	0	7	1	
4	10369	6.6	-0.83	-1.09	-5.1	0.068	-135	-233	0.9614	1.81	0.25	17.8	2	7	2	
2	10375	5.1	-0.78	1.39	7.9	0.049	-235	-212	0.9963	2.59	0.48	13.2	-2	8	1	
2	10376	6.6	-0.88	-1.17	-37.4	0.069	19	-230	0.9773	3.56	0.47	9.8	-1	7	1	
4	10379	8	-0.19	0.49	-37.2	0.401	39	172.2	0.9554	3.13	0.38	9.742	0	9	2	
2	10380	12.6	0.94	1.47	-5.5	0.063	27	173	0.9987	5.17	0.1	9.118	0	7	1	
2	10383	2.2	0.55	0.84	11.2	-0.075	-142	56	1.035	3.21	0.426	13	-1	9	1	
5	10385	6.8	-0.93	0.41	12.9	0.267	61.5	-179	1.037	2.52	-0.39	10.2	1	7	3	
4	10387	6.8	1.1	0.3	4.2	-0.081	61.68	165	0.9945	5.17	1.92	9.1	0	8	2	
2	10397	7	1.27	-0.2	127.2	0.035	-106	632	0.9782	3.26	0	12.3	0	8	1	
2	10412	6	0.615	0.04	0.8	0.032	9.33	-28	0.9524	3.48	0.37	11	1	7	1	
5	10413	6.6	0.27	0.72	-27.7	0.052	42.37	188	0.9915	3.68	-0.2	11	1	7	3	
2	10418	2.3	0.25	0.07	-1.8	0.056	13	518	0.9935	4.12	0.4361	9.5	-1	7	1	
4	10420	7.6	-0.69	0.32	3.6	-0.528	22	508	0.9914	3.08	0.6	12.5	-1	8	2	
4	10427	8.3	-0.37	0.43	2.5	0.036	32	261	0.9944	4.1	0.44	-1.6	0	9	1	
4	10428	6.2	0.37	0.3	67.1	0.594	79	200	0.9954	3.29	1.16	13.9	-1	7	2	
2	10430	15.9	0.28	0.26	6.452	0.042	463	450	0.9925	3.69	0.5	10.7	0	8	1	
4	10435	7.6	0.1	1.76	1.3	0.047	21	100	0.9644	2.77	0.4846	9.5	0	6	2	
2	10436	16	0.5	0.34	13.7	-0.104	216	184	0.9998	3.08	0.4737	9.95	-2	8	1	
5	10446	6.4	-2.285	0.29	-74.9	0.035	44	-147	0.9426	3.32	0.55	10.7	1	7	4	
5	10448	18	0.28	1.29	14.8	0.174	-99	178	0.9758	3.25	-1.3	16.9	-1	8	3	
4	10449	27.6	0.26	-1.31	41.5	-0.342	34	225	0.9969	4.19	0.41	10	1	7	2	
2	10463	7.6	0.87	1.87	9.4	0.29	314	124	0.9807	3.07	0.61	9.7	-1	8	1	
2	10469	3.3	0.31	0.29	10.5	0.448	-182	145	0.9966	3.04	1.88	10.1	-1	8	1	
5	10470	5.8	0.62	1.32	6.1	0.019	27	12	0.9936	3	0.5568	11.38	0	6	3	
4	10471	9.1	0.905	-0.53	5.102	0.09362	27	353	0.9943	3.19	0.38	7.6	0	6	2	
5	10473	7.4	0.19	-0.09	114.9	0.045	39	-204	1.005	3.05	3.19	0.5393	11.88	1	8	3
4	10476	7	0.43	0.31	22.63	1.204	104	262	1.031	3.38	1.12	12.2	-1	8	2	
2	10482	9.9	-0.85	1.39	19.7	0.759	49	288	0.9947	4.32	-0.64	15.3	0	7	1	
4	10500	6.4	0.28	-0.89	5.4	0.042	67	181	0.9752	3.31	0.35	10.2	-1	7	2	
5	10511	12.4	1.96	0.49	45.8	0.052	34	391	0.9505	2.99	0.61	11.04	1	7	3	
4	10512	8.1	1.21	-2.8	11.8	0.507	46	212	0.9284	3.09	0.46	10	1	9	2	
4	10514	11.5	1.31	0.3	12.8	0.177	-157.5	-29	1.005	3.76	-1.28					

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
5	10663	14.1	2.115	0.22	0.7	0.072	49	748	1.002	2.63	0.55	15.5	2	9	3
2	10672	6.7	-0.64	-0.52	54.5	0.348	62	33	0.9512	3.21	0.59	19.2	0	7	1
5	10678	7.8	0.2	0.32	-9.4	0.016	31	101	1.017	2.99	-0.26	16.1	1	8	3
5	10685	17	0.46	0.49	51.75	0.1407	6	342	0.9911	2.67	-0.04	11.4	0	9	3
5	10690	24.7	1.52	0.4	2	0.432	291	72	0.9681	3.74	2	12	1	8	3
4	10702	7.7	0.14	-0.99	-19.6	0.044	172	116	0.9485	4.47	0.53	6.5	0	7	2
2	10706	6.7	0.29	-0.52	-45.7	0.054	304	181	0.9987	3.56	2.33	9.1	1	7	1
2	10708	14.3	0.28	0.3	1.6	0.047	46	132	1.011	2.64	0.38	4.8	-1	7	1
4	10716	-3.2	-1.12	-0.53	11.7	-0.166	44	150	0.9958	3.31	-0.12	10.4	-1	8	2
5	10717	8.2	0.42	-0.07	-37.1	-0.507	228	261	0.9978	4.49	0.4261	10.54	0	8	4
5	10720	6.1	0.41	0.24	44.4	0.429	-230	68	0.9627	3.32	0.5	13	1	7	3
2	10729	7.4	0.5	2.64	2	0.086	21	73	0.997	3.36	0.57	9.1	0	8	1
5	10730	8.8	-0.83	1.29	4.7	0.222	153	88	1.029	3.37	0.58	14.6	1	7	3
4	10745	5.8	0.24	0.44	-44.5	-0.04	5	-224	0.9796	3.53	-1.65	5.9	1	6	3
2	10753	8.8	0.26	0.74	13.3	0.044	68	414	0.9948	3.18	0.7559	5.1	-1	8	1
2	10754	6.6	0.34	0.39	6.9	-0.478	-164	-587	1.011	2.97	0.53	9.5	-1	8	1
2	10762	12.1	0.75	-1	6.3	0.246	19	246	1.008	3.09	0.53	11.1	-1	8	1
2	10766	2.4	-0.75	1.94	-36.4	-0.123	26	86.34	1.022	3.16	0.44	10.2	-1	8	1
2	10776	13.1	0.49	-1.71	34.3	-0.11	-237	24	0.9944	2.53	0.83	11.3	-2	8	1
2	10783	7.9	-0.12	-1.12	1.6	0.106	10	244	0.9578	4.27	0.39	9.5	0	9	1
4	10789	10.8	0.31	0.38	52.8	0.061	49	-99	1.019	3.4	0.58	11	-1	9	2
4	10790	6.1	-1.22	0.31	-29.85	0.478	249	-72	0.95	2.86	0.61	9.3	2	7	2
2	10797	8.8	0.63	1.57	0.291	0.096	22	80	0.9902	3.44	0.4	10.2	1	10	1
2	10807	7	0.24	-0.4	1.7	0.286	48	308	0.992	3.25	-0.85	11.4	0	7	1
4	10810	7.6	-0.12	0.31	-22.9	0.079	-252	189	0.9972	3.82	0.62	9.942	0	8	2
2	10817	16.2	0.38	0.29	12.7	0.05	-202	376	0.9986	3.25	0.59	4	1	8	1
2	10820	0.8	0.3	-7.2	0.048	40	-68	0.9765	3.97	-0.58	10.8	-1	6	1	
4	10822	0	0.28	0.31	2	-0.973	225	262	0.9958	3.15	0.86	10.1	0	10	2
4	10828	7	0.35	0.3	-57.7	0.04	-57	520	0.9927	3.28	0.49	9.1	1	8	2
2	10829	6.5	0.32	0.33	8	0.01745	-133	666	0.9897	3.28	1.95	8.7	-1	7	1
4	10830	-1.2	0.59	-0.03	-32.6	0.044	-49	403	0.99	3.19	0.37	15.8	-2	6	2
6	10831	5.9	1.08	0.28	49.4	0.039	196	139	0.9611	2.64	-0.96	15.5	1	6	4
4	10841	12.1	0.14	0.49	6.7	0.035	508	120	0.9983	3.26	1.73	6.1	2	9	3
4	10847	14	0.18	-0.41	10.2	0.028	-201	-292	0.9974	3.49	0.8149	16.1	-1	6	2
2	10856	10.2	1.66	1.22	57.1	0.618	11	24	0.9974	3.29	1.26	11.9	-1	11	1
2	10860	10.7	0.35	0.53	37.4	0.065	-122	16	1.013	3.54	0.5166	5.8	0	12	1
5	10861	-10.1	-0.64	0.26	55.9	0.042	368	469	0.9713	3.43	0.3298	8.2	1	7	3
2	10863	6.8	0.3	0.72	21.5	0.041	65	168	1.025	3.1	0.9	9.8	0	7	1
2	10875	1	1.35	0.28	2.7	0.034	-530	-238	0.9621	3.35	0.7086	10.2	0	8	1
5	10884	19.1	0.61	-0.02	-33.8	0.364	34	184	1.001	3.31	2.85	13.6	0	7	3
4	10895	-2.7	-0.15	0.32	-57.4	0.027	259	72	1.037	3.5	0.45	12.5	-1	6	2
2	10897	6	1.05	0.32	6.93	0.053	31	419.5	1.042	3.29	0.72	17.4	0	7	1
2	10898	7.4	0.83	0.27	14.1	0.1036	-164	173	0.9933	1.86	0.52	8.2	0	8	1
5	10903	7.8	1.58	0.49	-28	0.1	5	443	1.001	3.25	0.74	11.9	1	14	3
4	10908	7.4	0.16	0.49	-105.7	0.086	18	150	0.9751	4.05	0.47	8.6	1	8	2
2	10924	7.2	2.06	0.54	-13.1	0.114	-59	9	0.9972	4.32	-0.33	5.9	0	8	1
2	10926	1.5	0.18	0.39	-15.32	-0.268	48	-243	0.9737	3.35	2.42	2.5	-1	8	1
2	10927	12.2	0.25	-1.14	8.1	0.045	54	180	0.9958	3.39	1.62	9.673	0	7	1
2	10928	7	0.35	-0.08	0.9	0.049	-223	119	0.9412	3.13	0.36	12.8	0	8	1
2	10933	17.8	0.25	-1.24	40.4	0.042	28	166	1.037	3.19	0.59	9.7	0	11	1
5	10939	1.4	0.23	0.31	2.1	0.046	-20	258	0.9926	5.05	2.41	10.7	1	7	4
4	10942	9.6	0.68	1.59	-41.8	0.087	5	173	0.9988	2.79	2.02	10.2	1	11	2
4	10945	11.1	0.35	0.28	1.1	0.055	9	435	0.9579	4.1	0.5	9.1	-1	7	2
4	10949	-1.3	0.28	0.24	19.95	-0.494	32	174	0.9863	4.24	0.44	9.9	0	7	2
2	10950	6.7	0.31	0.18	7.7	0.043	57	200	0.9656	3.72	0.44	9.782	0	7	1
5	10958	7.3	1.7	0.31	10.2	-0.021	58	437	0.9977	2.7	0.45	8.6	2	8	3
4	10963	6	-1.18	0.33	55.8	0.834	27	336	0.9592	3.74	1.6	6.5	0	7	2
4	10967	14.7	0.31	2.57	-21.65	-1.033	292	129	0.9898	4.52	-0.88	9.5	-1	6	2
2	10971	-3.9	0.44	1.6	-30.8	0.02927	12.42	24	1.045	3.68	0.24	9.2	0	8	1
5	10972	-1.4	0.21	-0.48	5.8	-0.518	29	473	1.014	3.15	0.4	16.5	0	7	3
4	10974	5.9	0.87	0.68	-90.6	-0.425	69	74	1.033	4.08	-1.13	13.4	0	8	2
5	10976	6.5	0.89	1.12	34.5	0.091	47	129	1.028	4.4	-0.63	10.3	0	7	4
2	10980	14.3	1.2	0.26	5.1	0.051	16	119	0.973	3.15	1.95	13	0	7	1
2	10991	7.9	-0.94	-1.02	-12.1	0.15	-9.5	1004	1.012	0.88	-1.26	9.1	0	8	1
4	10995	6	-0.78	0.58	1	0.034	70	101.5	0.949	3.21	0.42	6	0	7	3
5	11014	7.6	1.46	0.32	3.5	0.375	316	113	0.9912	3.85	0.71	11.3	1	7	3
4	11017	5.2	0.92	0.18	3.61	0.036	41	129	1.022	3.98	0.5111	13.4	1	6	2
4	11019	18.5	0.16	-0.25	28	0.044	-84	149	0.998	3.12	0.46	14.3	1	7	2
2	11022	6.6	0.36	0.53	71.6	0.052	-11.59	-293	1.005	2.94	0.35	6.3	0	7	1
5	11030	5.6	0.35	-0.72	2.5	0.046	-218	182	0.9615	3.365	-0.4	11.3	0	6	3
4	11031	10.5	0.13	1.52	1.1	0.275	63	203	0.9907	1.48	1.2	11.2	-1	7	2
5	11041	1.4	0.26	-0.93	61.7	-0.351	101	66	0.9909	3.25	0.75	7.4	0	7	3
4	11042	5.2	-0.38	0.44	2.6	0.033	35	37	0.9969	4.17	0.5	11	0	8	2
5	11044	7.7	0.4	0.31	-5.1	0.03751	27	-281	0.9918	3.21	0.59	10	0	8	3
4	11047	6.7	0.24	0.41	9.4	-0.545	49	166	1.022	3.46	0.4231	9.9	1	7	2
2	11048	15.3	-0.355	-0.46	4.5	-0.311	16.19	124	0.9994	3.15	0.5727	9.9	0	7	1
2	11049	17.6	0.12	0.21	1.3	0.222	-221	98	0.9765	2.31	-0.55	22.6	0	6	1
2	11052	7.2	0.51	2.9	57	-0.536	22	-134	0.9236	2.85	0.2	8.3	0	7	1
5	11058	8.5	0.61	0.32	5.9	0.092	136	-284	0.9934	2.07	0.4	11.7	0	8	3
4	11069	6.9	-0.51	0.49	16.1	0.032	35	148	0.9131	4.37	-0.73	13.9	-1	8	2
4	11070	11.1	0.37	-0.59	1	0.034	270	94	0.9916	3.84	0.5866	11.7	-1	9	2

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	11234	-4.6	0.12	0.3	3.1	0.018	-206	499	0.99	3.22	0.52	10.4	0	8	2
4	11238	7.2	0.33	0.73	3.4	0.034	8	109	0.9925	4.01	0.57	15.1	0	8	2
4	11244	-0.7	-0.6	-0.63	8.4	-0.489	52	519	0.9963	4.24	-0.99	9.982	-1	8	2
2	11246	4.6	0.99	0.29	49.2	0.052	51	449	0.9954	3.02	0.58	4.2	-2	7	1
5	11248	3.8	1.56	1.52	1.6	0.048	-531	366	0.9908	6.21	0.75	14	2	5	3
2	11250	7.7	0.64	0.21	-29.6	0.077	32	489	0.9657	2.36	0.45	13.2	0	9	1
3	11256	17.5	0.24	1.13	-32.5	-0.201	52	177	1.043	3.13	1.33	2.5	1	8	2
2	11259	9.8	0.28	0.4	8.9	-0.344	29	146	0.9926	5.65	-1.17	9.3	-1	9	1
2	11263	4.3	-1.07	0.32	65.9	0.355	4	15	0.9589	1.99	2.14	9.8	0	10	1
2	11264	7.1	0.3	1.27	-20	0.055	32.8	342	0.9972	2.31	0.55	0	0	8	1
3	11270	18.4	0.34	0.21	14.28	-0.208	265	549	0.9204	3.25	0.06	4.1	-1	8	2
4	11274	6.7	1.25	-0.16	4.75	-0.134	29	134	0.9534	2.92	1.53	17.8	0	7	2
4	11281	12	0.2	-1.97	-28.1	0.045	27	153	0.9964	2.4	0.8907	9	-1	8	2
4	11285	8	-0.62	2.3	9.6	-0.21	23	375	1.001	3.32	1.98	7.8	0	9	2
2	11300	10.3	-1.02	-0.87	-31.8	0.078	-107	28	1.024	2.57	0.87	5.8	-1	10	1
4	11305	8.7	-0.59	-0.89	32.8	0.398	-528	532	1.049	3.12	0.47	8.8	-1	9	2
5	11317	6.5	0.9	-0.2	2.7	0.198	208	107	0.9912	3.32	0.41	11.6	-1	7	3
2	11319	6.9	1.15	0.22	4.6	-0.207	55	152	0.9685	4.28	2.14	9.3	-1	7	1
5	11330	6.2	0.09	1.19	1.4	0.08194	23	81	1.018	3.26	0.42	16.1	1	7	3
5	11334	14.3	0.12	0.55	24.95	0.062	-63	-188	1.013	3.27	2.23	9.1	1	8	3
5	11335	8.2	0.29	-0.01	42	0.082	288	207	1.025	3.276	0.5623	10.8	1	9	4
2	11336	7.3	0.22	-0.59	32.5	-0.054	110	463	1	2.79	0.38	9	0	8	1
5	11356	6.6	1.53	0.51	-17.9	0.046	20	482	1.022	4.37	0.48	9.4	0	7	3
4	11358	10.3	0.41	0.42	-29.6	0.213	6	-57	0.9994	3.19	1.95	13.8	0	11	2
2	11360	6.7	0.25	0.26	-107.3	-0.157	118.5	-169	0.9949	3.55	0.63	9.4	0	7	1
2	11364	9.7	0.32	0.42	8.3	0.075	12	-27	1.035	3.231	0.71	11.8	0	9	1
5	11373	-0.2	0.215	0.29	3.3	0.04	10	69	1.043	2.74	-0.08	4.5	1	6	4
5	11379	5.9	0.56	1.2	12.5	-0.42	36	152	0.9972	3.28	0.43	10	-1	6	3
5	11382	15.7	1.29	0.28	53.5	0.042	-188	116.3	0.9952	2.3	2.09	13.3	0	7	3
2	11383	7	0.29	0.84	-0.817	0.194	16	502	0.9846	2.19	0.42	16.9	0	6	1
5	11385	-3.2	0.38	0.49	-42.3	0.036	20	506	0.99	1.83	-0.19	12.1	0	9	3
4	11387	-3.1	1.06	0.27	8.8	0.248	57	148.7	1.027	3.08	0.38	15.7	-1	8	2
2	11391	0.3	0.3	0.2	4.284	0.039	34	132	0.9916	3.85	0.38	12.6	0	7	1
2	11397	-5	1.09	-0.94	-54.7	-0.031	-159	410	1.001	2.64	1.69	8.4	-1	7	1
2	11404	0.3	-0.26	2.11	2.9	-0.057	28	-300	0.9893	3.13	-0.98	10.7	-2	8	1
2	11405	13.4	0.37	0.34	-2.4	0.028	5	17	0.9771	1.99	0.06	7.9	1	11	1
3	11409	8.2	0.15	1.47	2.7	0.052	24	190	0.9863	3.5	1.82	4.1	1	9	2
4	11419	-4.3	0.22	0.4	14.75	0.474	-98.5	123.5	0.977	3.36	-3.05	9.1	-1	8	2
5	11430	6.6	0.24	0.1	69.3	0.069	-207	182	0.9939	4	-0.31	9.75	0	6	3
5	11434	14.2	0.92	-0.37	-32	0.616	273	-80	0.9932	3.41	0.5	10.8	1	7	4
2	11436	7.5	0.23	1.75	2.6	0.031	118	98	1.036	1.77	0.54	9.5	-1	8	1
2	11440	7	0.22	-0.06	44	-0.38	31	71	0.9854	3.6	0.38	7.6	1	7	1
2	11443	13.7	-1.23	-0.78	10.06	0.047	32.51	142.6	0.9532	3.13	0.49	14.4	-1	7	1
4	11449	6.4	-0.55	2.48	24.6	0.493	257	240	0.9521	3.11	1.09	8.5	-2	7	2
4	11452	9.6	0.7	0.27	2.2	-0.46	5	80.15	1.043	3.14	-0.1	13.3	1	11	2
4	11453	16.2	-0.84	-1.31	2.2	0.088	9	47.62	0.9972	2.25	2.1	7.3	-1	8	2
5	11456	11.7	-0.43	-0.51	4.8	0.083	5	-196	1	4.05	0.43	9.5	1	13	3
4	11457	7.3	1.61	0.16	18	0.557	94	224	0.9968	3.14	0.56	9.5	0	8	2
4	11459	6.9	1.13	-0.79	15.4	-0.153	-137	201	0.9985	3.26	-0.48	4.9	1	8	2
2	11471	9.8	0.39	0.43	-13.05	-0.19	35	11	0.9948	3.7	0.46	11.4	0	11	1
4	11476	6	1.68	0.72	1.3	0.046	6	137	0.9932	4.48	0.65	14.5	-1	7	2
2	11479	10.4	-0.64	1.6	-45.5	0.225	11	-331	0.9734	1.95	-0.44	15.3	-1	9	1
4	11481	18.6	0.36	1.04	-48.4	0.054	9	165	0.9933	3.06	0.49	8.6	0	8	2
2	11485	8	-0.92	-0.05	1.1	-0.542	117	-201	0.9877	4.97	0.34	11.2	1	9	1
2	11486	15.7	-0.06	0.49	56.5	0.763	58	156	1.044	3.1	0.2491	9.4	0	9	1
2	11487	17.3	0.29	0.31	7.35	0.034	37	513	1.031	4.14	0.31	10.8	0	9	1
2	11488	0.5	0.16	2.67	1.6	0.103	-198	147	1.007	2.96	0.36	11.1	-1	9	1
5	11498	5.3	-0.155	0.19	1.5	0.458	11.92	62	0.9993	2.6	-0.98	11.15	1	6	4
2	11506	12.8	-0.53	1.65	2.9	0.035	-84	827	0.9464	3.04	0.37	12.5	-1	7	1
5	11511	7.4	0.22	0.32	1.7	-0.493	23	-260	1.001	3.243	0.66	11.2	1	8	3
4	11515	6.8	-0.05	0.36	-10.6	0.045	245	-604	0.9008	1.86	0.3895	11.15	-1	7	2
2	11518	0.2	-0.59	0.99	2.9	0.084	25	-501	1.003	2.7	0.711	8.9	-1	10	1
2	11521	0.3	0.18	0.9	55.5	-0.438	14	77	0.9939	4.31	0.3869	11.7	-1	9	1
2	11523	14.6	-0.15	0.35	57.5	0.036	-103	85	0.992	3.93	0.4585	14.4	0	8	1
5	11524	7.4	0.49	1.44	2.1	-0.107	37.29	96.72	0.9782	2.74	0.63	12	1	8	3
4	11525	6.4	1.75	1.87	120.5	0.496	83	158	0.9928	4.4	1.37	9.8	0	7	2
2	11528	18.2	-1.74	1.37	1.7	0.085	14	374	0.9959	3.37	0.51	10.4	-1	8	1
2	11530	6.6	1.38	0.21	26.3	0.044	-140	-218	1.042	1.39	1.24	9	0	7	1
4	11531	6.6	0.17	0.36	15.6	0.036	-146	-198	0.9906	3.21	0.54	7.8	-1	7	2
2	11533	6.9	0.37	1.14	-53.9	0.057	54	319	0.9712	3.23	2.12	10	0	8	1
4	11535	6.6	0.43	-0.18	11.9	-0.367	54	-113	1.082	2.55	0.54	9.8	0	7	2
4	11537	1.7	0.18	2.02	55.9	0.061	25	435	0.995	3.22	0.33	10	0	8	2
4	11538	6.4	0.38	0.14	-47.6	0.161	78	406	0.961	3.11	0.6	12.9	-2	7	2
2	11541	5.9	0.09	0.2	14.4	0.05	29	146.7	0.9967	3.24	1.13	10.3	-2	6	1
4	11548	8.8	0.23	0.35	45.7	0.546	26	127	1.043	2.33	-1.04	2.9	0	9	3
2	11552	5.8	0.28	1.24	3.9	0.026	36	105	0.9425	3.26	0.14	12.75	-1	6	1
5	11558	-1.4	-1.03	0.17	17.75	0.06	66	-166	0.9558	3.49	-0.24	12.4	1	7	3
2	11560	6.7	0.55	1.56	-7.1	0.054	27	202	0.9948	3.92	0.89	8.5	0	7	1
4	11566	7.3	0.25	-0.11	8.9	-0.513	370	182	0.9996	4.23	2	9.1	0	8	2
2	11572	8.8	0.35	0.49	1	0.431	301	56	0.992	2.25	0.33	1.1	0	10	1
5	11573	11	0.17	-0.68	32.3	0.029	93	161	0.99	3.07	0.18	12	0	5	3

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	11710	4.8	0.16	0.24	1.6	0.524	32	114	1.013	3.21	3.19	6.4	-1	6	3
4	11711	12.6	0.46	-2.81	-40.7	0.366	88	34	0.9948	2.3	2.33	4.4	-1	7	2
4	11714	2.4	0.66	0.31	-10.4	0.274	22	73	1.025	3.81	-0.49	15.5	-1	7	2
4	11731	11.5	0.31	0.29	-17.8	-0.125	218	503	1.041	3.09	0.5424	9	1	7	2
2	11732	11	-1.44	0.68	-49.75	0.104	8.79	-1	0.997	4.15	-1.85	11.8	0	12	1
2	11742	13.6	-1.2	-0.41	2.2	0.048	48	-291	0.995	3.171	1.01	12.4	0	9	1
3	11744	4.8	0.19	-0.56	-23.4	-0.275	-165	181	0.9935	3.56	0.27	3.5	0	7	2
2	11745	17.4	0.16	0.32	-15.1	-0.059	-4	28	1.02	3.26	-0.61	11	0	6	1
5	11749	11.6	-2.59	0.31	17	0.026	31	116	0.9989	3.33	1.66	11.65	1	6	3
2	11756	6.3	0.3	1.56	-45.4	0.541	18	97	0.9959	3.44	0.33	12.5	1	7	1
2	11761	17.6	0.4	0.51	2.6	0.052	-61	648	0.995	3.6	0.9	13.4	-1	10	1
5	11762	17.9	0.16	0.59	23.9	0.185	254	-265	0.9959	2.88	-0.17	9.3	0	7	3
5	11766	14.2	0.13	-1.24	4.524	0.643	23	502	0.9897	5.65	-1.25	17.4	0	6	3
5	11767	4.4	-0.51	1.3	-51.8	0.03	-160	127	0.989	3.45	0.36	12.8	2	5	4
2	11769	5	1.33	0.33	132.3	1.089	31	145	0.9983	3.36	1.85	13.1	0	7	1
4	11770	6.8	0.24	-0.9	18.3	0.046	40	290	0.9637	3.3	0.17	8.7	0	7	2
5	11771	17.4	1.33	1.07	13.7	-0.101	44	-574	0.9989	1.98	0.64	11.4	0	8	3
4	11777	7.5	-0.36	-0.44	1.2	0.032	486	152	0.9913	2.99	0.52	18.7	-1	8	2
5	11778	8.7	0.33	0.33	1.7	0.061	230	13	0.996	3.23	-0.66	10.95	1	8	3
5	11779	7.1	0.85	0.28	-24	0.082	570	-285	0.9618	3.45	0.48	9.4	0	8	3
2	11788	-1.4	-0.62	1.86	49.7	0.182	114	424	0.9695	4.57	-1.15	16.7	0	7	1
4	11790	17.3	-0.34	0.23	-36.4	0.149	35	240	0.965	4.15	1.66	10	1	8	2
4	11794	11.6	0.43	0.24	1.1	-0.016	283	163	0.9818	3.93	0.07	10.64	0	8	2
4	11801	2.6	0.31	0.44	33.6	0.054	243	4	0.9877	3.04	0.6662	8.9	0	7	2
2	11807	7.7	0.66	0.04	1.6	-0.218	4	-99	0.9962	3.7	0.47	9.1	0	8	1
4	11812	8.2	1.23	0.49	3.5	0.057	14	-469	0.9912	3.47	0.43	5.7	0	9	3
5	11817	7.9	-0.57	0.73	2.1	0.651	33	-150	0.9895	3.25	-1.27	9.9	1	9	3
2	11818	7.6	0.23	-0.71	-120.1	0.106	24	13	1.089	4.18	0.7677	10.4	0	8	1
4	11825	7.4	1.53	1.24	11.9	-0.179	13	-264	0.9976	3.01	2.02	10.8	1	8	2
5	11828	2	1.18	0.32	14.65	0.032	-86	114	0.9916	3.12	0.6348	12.8	0	8	3
5	11833	6.7	0.24	1.15	3.85	-0.384	80	-12	1.023	2.01	0.59	13.2	0	7	3
5	11837	7	0.34	-0.76	-5.8	0.041	-83	145.2	0.9938	3.125	0.35	11.6	1	8	3
2	11838	11.4	1.19	0.44	55.6	0.632	-269	22	1.029	2.46	-1.85	9.5	0	10	1
4	11842	5.6	-0.085	-1.16	6.8	0.042	-80	84	0.9896	3.337	0.11	4.4	0	6	2
5	11853	4.7	0.28	0.34	1.6	0.028	32	118	0.9901	2.29	1.66	15.4	0	8	3
5	11857	6.8	0.27	0.32	1.5	-0.12	71.5	142	0.9921	3.14	1.26	12.1	0	7	3
2	11858	-0.8	0.55	0.66	50.1	0.699	-244	37	0.9982	2.09	-0.29	9.6	0	11	1
4	11860	6.5	-0.05	0.32	-47.8	0.045	-93	-199	1.022	4.44	-0.68	6.7	1	7	3
4	11867	7	-0.65	1.74	-0.4625	0.355	30	-152	1.028	3.15	0.6255	12.5	0	8	2
5	11868	7.1	-1.91	0.88	22.7	0.03	-31	126	0.9901	3.22	0.34	12.1	0	8	4
5	11871	6.4	0.26	-0.33	29.5	0.213	33	109	0.992	3.267	0.6513	12.7	0	7	3
2	11875	7.5	-0.93	1.46	19.9	0.057	131	148.9	1.016	4.28	1.51	10.5	2	8	1
5	11881	7.5	0.33	-1.16	-18.85	0.032	197	243	0.964	3.55	0.4	14.1	2	8	3
5	11890	6.8	0.8	0.35	61.3	0.433	-166	96	0.9878	3.23	-0.72	8.1	1	7	3
5	11892	5.5	0.84	0.13	1.3	0.05843	45	-12	0.9918	3.26	0.38	10.7	0	6	3
4	11894	4	0.64	0.31	44.7	0.083	7	49	1.031	3.17	1.67	8.3	-1	8	2
4	11896	12.6	0.34	1.74	4.7	0.029	34	148	1.015	4.93	0.5738	14.1	1	8	2
4	11903	17.6	0.28	0.42	-30	0.045	41	169	0.9959	3.17	0.9	10.6	1	9	2
5	11905	6.6	0.29	-0.67	-40.4	0.036	38	318	0.9761	3.17	0.42	13.7	-1	7	3
2	11907	7.5	0.63	-0.87	1.2	0.332	-128	503	0.9502	3.37	1.17	13.6	0	8	1
5	11909	7.3	0.14	-0.51	-1.7	0.032	-85	-490	0.9824	3.32	0.44	12	2	7	4
2	11911	-15.4	0.25	-1.23	8.05	-0.297	118.5	216	1.039	3.55	-0.05	2.9	0	7	1
2	11915	6.8	0.21	0.66	29.7	0.216	24	126	0.9923	3.39	1.06	10.9	-1	7	1
4	11918	10.4	1.22	0.55	3.2	-0.094	300	54	0.9996	4.3	0.6196	6.9	0	11	2
5	11920	13.1	-0.23	0.39	1.5	0.129	187	83	0.9908	2.96	1.78	10.7	0	7	4
5	11923	6.8	1.57	-0.33	1.8	0.033	297	-149	1.003	3.64	1.95	15.2	0	7	3
2	11924	6.3	0.39	-2.3	0.442	0.048	325	442	1.031	3.24	0.47	10.4	0	7	1
2	11926	7.6	0.4	1.44	46.1	0.096	109	373	0.9983	3.32	0.45	10.2	-2	8	1
4	11931	10.1	1.91	0.69	11.3	0.0379	61	318	1.025	2.15	1.37	9	0	8	2
5	11933	17.4	-0.75	0.39	-53.2	0.247	-98	451	0.9989	3.98	0.43	14.4	0	8	3
4	11940	5.4	0.31	1.74	3	0.053	46	464	0.9892	3.29	0.76	10	1	6	2
2	11951	14.4	1.46	-0.65	11.3	-0.137	277	304	0.9984	2.22	0.43	9.2	1	8	1
2	11953	9.6	0.23	0.25	-4.8	0.093	19	-17	1.1	3.1	0.67	8.7	0	8	1
5	11973	6.9	0.61	0.21	15.7	0.056	280	63	1.035	2.51	0.5897	13.4	0	7	3
4	11984	5.2	0.17	0.27	0.7	0.03	216	411	1.013	3.3	0.534	15.7	-1	6	2
2	11985	1.5	-0.35	-1.09	58.2	0.042	25	256	0.997	3.35	-0.32	10.4	-1	7	1
2	11991	-6.1	0.26	-0.14	8.1	-0.356	366	197	0.9956	1.98	0.48	9.5	-1	7	1
2	12002	-1.5	2.17	0.11	-18.85	0.039	182	162	1.013	2.74	0.5	11.2	0	6	1
4	12006	1.2	0.45	0.27	4.7	0.035	17	187	1.013	3.12	0.4931	12.5	-1	8	2
5	12008	5.4	0.3	-0.23	21.7	0.029	25	93	0.9629	3.31	0.4	16.3	0	6	3
2	12013	-3.2	0.24	0.42	-27.6	0.087	112	262	0.9979	1.96	0.42	8.9	-1	8	1
5	12015	-5.7	-0.41	-1.31	72.4	-0.317	37	388	1.017	3.06	-0.92	13.5	-1	7	3
5	12016	6.3	1.5	-0.02	-97.9	-0.254	54	518	0.9579	3.16	0.42	14.6	0	7	3
2	12023	6.8	-0.72	0.02	1.7	0.06792	18	-331	0.9859	3.431	0.63	5.8	0	7	1
5	12029	6.1	-0.25	-0.78	3.9	0.034	42	348	1.037	3.24	0.46	10.9	0	7	3
4	12036	-0.5	0.81	-0.2	64.9	-0.051	-161	179	0.9968	4.1	1.75	18.6	0	9	2
2	12038	6.5	0.17	0.54	8.5	0.082	64	397	0.9959	1.99	0.39	8.8	1	7	1
4	12041	7.3	-0.11	1.02	-37.8	0.034	140	147	0.9909	3.25	1.24	11.9	1	8	3
4	12049	7.2	-0.82	0.2	9.9	0.1209	21	174	1.035	2.51	2	6	1	8	2
2	12050	17.3	2.11	0.02	1.3	0.072	-226	91.62	0.9965	3.1	1.08	9.2	1	8	1
2	12054	14.1	0.24	0.34	2.7	0.356	282.5	218.5	0.9934	3					

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	12183	9.8	0.61	0	2.2	-0.16	48	59	0.9807	3.61	0.7925	12.9	0	7	2
4	12188	0.9	-0.96	-0.59	26.8	-0.561	176	19	0.9636	3.31	0.5077	12.6	0	8	2
5	12189	6.4	-0.13	0.06	1.8	-0.046	43	477	1.006	3.42	0.69	11	0	7	3
4	12192	1.5	0.28	1.08	1.6	0.045	36	431	0.9953	3.11	0.5356	6.2	0	10	2
4	12201	5.9	0.17	0.02	-48.9	0.03	32	311	0.9891	0.96	-1.19	8.1	-1	6	2
2	12204	12.7	0.23	0.6	2.2	0.565	7	18	0.9379	3.04	0.25	16.3	-1	12	1
2	12207	9.3	0.005	1.87	-27.2	0.07	27	39	1.017	3.12	0.59	9.9	-1	10	1
2	12208	8.9	0.48	0.97	3.5	-1.012	10	40	0.9944	3.1	0.36	9.8	-1	10	1
4	12209	7.3	2.695	0.33	1.1	0.044	14	-325	0.9901	3.1	0.6751	12.4	0	8	2
5	12210	7.6	0.42	-0.82	1.9	0.047	-165	432	0.9937	3.2	0.53	13.9	2	8	4
4	12217	7.1	0.05	0.25	1.3	-0.055	-100	524	0.9936	3.27	0.55	8	-1	8	2
4	12227	8.6	0.29	1.96	32.5	0.427	288	120	1.014	3.06	1.04	12.1	0	7	2
5	12231	6.2	0.25	1.01	-30	-0.278	272	71.15	1.053	4.09	0.34	12.8	-1	7	3
4	12232	7.6	0.17	1.1	7.1	0.05	227	228	0.9942	1.88	-1.11	9.5	0	8	2
5	12239	3.9	0.275	1.45	5.4	0.118	-119	245	0.9926	2.96	-0.79	10.8	1	6	3
2	12240	7.3	-0.96	1.02	7.4	0.061	-23	-380	0.9963	3.31	0.05	13	-1	8	1
4	12251	14	0.19	0.3	31.9	-0.245	33	-275	0.989	4.08	1.44	12.8	-1	7	2
4	12256	6.3	1.12	0.32	4.2	0.021	179	117	0.9918	3.93	0.43	12.8	1	7	2
2	12261	10.2	0.05	1.84	2.4	0.075	287	80.15	0.9862	2.36	2.19	24	0	11	1
4	12263	8.4	0.23	0.32	13.4	0.124	35	363	0.9881	3.12	0.47	8.8	-2	9	2
2	12266	8.6	0.55	0.35	15.55	0.102	35.5	248.5	0.9799	3.91	0.15	11	-1	10	1
2	12267	6.7	1.33	-1.12	1.35	-0.532	30.5	544	0.9939	3.54	0.53	9.5	0	7	1
4	12268	4.2	0.34	0.27	-30.8	0.047	21	144	0.9874	2.34	0.76	14.7	0	8	2
4	12279	-4.1	-0.21	0.29	64.7	0.051	25	86.14	1.087	4.27	1.62	6.3	1	8	3
4	12280	10.7	0.6	0.49	34	0.1	5	-381	0.9695	3.25	0.5025	11.9	1	14	2
2	12283	8	-0.83	0.44	-13.9	0.284	-18	111	0.9916	3.09	0.32	11.2	0	9	1
5	12284	13	-0.65	0.57	0.6	0.373	6	20	0.9965	3.4	0.48	13.3	1	10	3
5	12285	7.1	0.15	0.44	6	0.033	8	135	0.9893	3.19	0.3623	13.9	1	7	4
5	12286	6.3	0.79	0.3	2.8	0.239	33	125	1.031	3.03	0	14.7	1	7	3
4	12292	14.3	-1.1	1.04	14	0.032	47	365	0.98	4.44	0.5	10.53	1	7	2
2	12295	16	0.29	-2.88	2.3	-0.129	20	509	1.034	2.71	0.41	12.7	0	7	1
4	12301	11.8	0.52	0.17	-32.8	0.047	5	26	0.9932	3.26	0.8713	16.5	0	7	2
2	12314	1.6	0.19	0.32	18.75	0.356	106	517	1	2.06	1.69	6.5	-1	8	1
2	12315	10.3	-0.81	0.24	17.2	0.072	15	-176	0.9956	3.22	0.66	12.8	0	11	1
4	12318	8	0.32	0.16	-60	0.4	3	115.5	0.9945	3.22	0.58	11.2	0	9	2
5	12323	1.5	-1.1	1.31	-15.6	0.063	125	164	0.9657	3.17	-0.41	9.927	1	8	3
4	12334	6.9	-0.18	-1.15	1.5	0.224	19	-142	0.9958	3.91	0.78	14.4	0	7	2
4	12337	7.4	1.08	-0.08	8.8	0.027	23	341	0.9931	4.76	1.58	11.4	0	8	2
4	12338	7.1	1.15	1.16	30.7	0.109	30	124	0.9728	3.77	0.43	5.5	1	8	3
5	12349	7.5	0.47	-0.55	-55.6	0.048	275	89	0.9918	3.54	2.29	13.57	0	6	3
5	12350	-5.9	-0.29	0.3	12.4	-0.142	-98	168	0.9973	4.15	0.47	9.5	-1	7	3
5	12359	7	1.94	-0.52	-46.2	-0.555	28	181	0.9983	3.18	-1.03	9.3	1	8	4
5	12360	6.8	0.3	0.22	38.9	-0.523	41	521	0.9615	3.58	1.39	9.2	1	7	3
4	12373	-2.3	0.21	0.4	7.3	0.041	20.74	95.19	1.007	2.64	0.43	6.5	1	7	2
4	12374	6.7	-1.07	1.41	9.081	0.037	-1	310	1.02	3.06	1.83	9.1	-1	7	2
4	12380	8.1	0.26	-0.94	10.1	0.05	-183	375	0.9972	3.69	2.06	9	1	9	2
4	12382	6.2	0.44	-1.43	7.7	0.096	292	242	1.019	3.56	0.72	11.1	-1	7	2
3	12383	17.9	0.4	0.21	45.5	-0.372	44	182	1.048	3.35	0.54	3.6	-1	7	2
4	12390	7.4	0.44	0.17	-1	0.045	44	157	0.998	3.82	0.44	9.63	1	8	2
4	12398	6.5	0.27	1.12	-49.2	0.142	-104	175	0.9936	3.61	1.58	10.1	1	7	2
4	12405	6.4	0.18	0.77	-18.1	-0.059	24	90	0.9963	3.35	-2.82	9.4	0	7	2
2	12407	-0.4	1.41	1.64	-2.6	-0.266	-75	-31	0.9984	3.51	-0.15	15.8	0	7	1
5	12410	9.2	0.095	0.19	1.6	0.039	526	-170	1.065	4.17	0.41	6	1	6	4
5	12418	16.4	0.3	0.29	6.2	0.172	-200	95	0.9907	3.03	1.86	12.9	2	7	3
5	12421	7.4	0.42	0.47	14.15	0.667	6	185	1.015	2.8	0.4237	9.3	1	9	3
2	12422	11.9	0.39	0.41	-11.7	0.062	19	503	0.9963	3.04	0.95	9.4	1	8	1
2	12439	-4.2	0.695	-0.64	6.8	0.05969	-172	-59	0.9943	3.44	-1.89	3.6	0	6	1
4	12444	6.1	-1	0.38	-21.1	0.111	-118	106	0.9432	3.03	0.41	12.1	0	7	2
6	12463	5.8	0.32	0.28	4.3	0.032	286	115	0.9895	3.16	1.35	15.3	0	6	4
2	12465	11.9	-0.95	0.01	4.9	0.119	31	153	0.9966	3.27	0.51	3.4	-1	9	1
5	12470	14.9	0.15	0.34	61.5	0.035	31	-15	0.991	3.14	0.5398	9.7	0	8	3
3	12471	-5.1	0.21	-0.82	7.3	0.081	34	126	0.9962	2.86	0.46	3	0	7	2
5	12480	8.5	-1.16	0.48	10	0.058	146	275	1.036	3.25	0.37	11.9	0	9	3
4	12482	2.4	-0.22	0.4	-35.45	0.041	35	-346	0.9892	3.11	1.93	6.7	0	7	3
4	12484	8.6	0.32	0.29	9.4	0.038	-175	282	1.006	3.35	0.55	10.8	-1	8	2
5	12487	-2.4	0.52	0.11	2.9	0.605	13	38	0.9573	3.34	2.47	9.3	0	7	3
3	12491	7.4	0.64	0.76	31.15	0.1157	42	163	0.9984	2.9	0.49	-3.1	0	9	2
5	12503	8.8	1.32	0.44	33.4	0.042	138	-235	1.001	3.02	0.6751	13.2	0	10	4
2	12507	6.8	0.36	-2.81	5.1	0.227	67	122	0.9761	3.13	2.36	12.6	0	7	1
2	12526	12.5	0.39	-0.44	3.3	-0.046	109	81	1.036	3.27	0.56	12.2	-1	7	1
2	12533	3.9	-1.04	0.46	42.5	0.477	44	177	0.9969	3.36	0.24	9.4	0	7	1
4	12540	-1	0.785	-0.15	2.1	0.459	6	168	0.9966	3.59	0.62	7.7	0	7	2
2	12543	2.6	1.27	-0.8	12.5	0.602	38	3	0.9527	3.33	1.45	4.9	-1	6	1
5	12552	13.4	0.695	-0.05	19.4	0.118	12	127.6	0.9898	2.23	0.67	8.8	0	7	3
5	12555	6.4	0.29	0.18	15	0.588	-191	321	0.9472	0.9	0.5	9.2	2	7	3
5	12556	8	1.64	0.13	17.2	0.036	49	-238	0.9996	1.78	-0.43	9.7	0	8	3
4	12570	-6	1.26	-0.93	30.6	-0.34	218	61	0.9914	4.47	2.23	5.3	0	7	3
4	12579	11.7	1.5	0.38	77.4	0.054	32	445	1	3.22	1.56	9.7	0	9	2
2	12588	6	0.89	1.46	9.4	0.042	87	-253	0.9895	1.65	0.41	18.4	-1	7	1
4	12600	-0.1	0.3	-0.99	35.7	0.04	24	29	0.9939	3.324	0.5926	5.5	1	7	3
5	12615	5.6	0.34	0.02	6.9	0.038	192	89	0.9927	4.85	-1.14	16	1	6	3
4															

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	12782	7.6	-0.16	1.56	104.9	0.506	52	151	0.9056	3.18	-0.4	7.3	-1	8	2
5	12787	13.2	0.35	-0.84	-28.2	0.368	62.41	87	1.023	2.92	0.6868	12.2	0	9	3
2	12799	8.8	0.24	0.39	1.2	-0.433	32	85	1.006	3.16	0.5	10.5	-1	8	1
4	12804	12.8	0.18	0.26	-33.6	0.023	10	276	0.9893	3.07	0.54	12.3	1	6	2
4	12809	7.2	2.52	0.27	2.4	-0.535	-504	149	0.964	3.1	0.51	9.2	-1	8	2
4	12813	7.8	0.25	-0.5	-38.2	0.04	46	133	1.041	3.14	0.6	15.7	-1	8	2
4	12816	9.8	1.78	0.49	15.4	0.046	103	101	1	2.41	0.75	2.8	-1	11	3
4	12821	6	0.17	0.22	46.8	0.039	-177	104	0.9836	2.91	0.617	17.2	0	6	2
4	12826	6.4	-0.07	0.49	7.5	0.073	-66	151	1.025	2.18	1.73	8.3	-2	7	2
4	12831	-1.4	0.13	0.61	-52.6	0.054	124	104	0.9806	3.24	2.66	16.2	0	8	2
2	12832	5.8	0.39	-0.01	-29.8	0.042	36	138	0.9938	3.95	-1.22	23	1	6	1
4	12833	6.7	0.28	-0.45	-23.8	-0.451	-130	111	0.9946	3.25	-1.19	4.7	-1	7	2
4	12835	6.5	0.27	0.31	33.8	0.036	-188	179	0.9979	3.39	1.9	13.2	0	7	2
2	12842	4.9	0.425	2.53	37	-0.492	318	396	1.016	2.73	0.57	9	-1	7	1
3	12844	6.8	0.18	0.28	5.04	0.047	52	521	1.096	3.22	0.53	4.3	0	7	2
4	12847	8.6	0.34	1.49	-0.1	0.471	11	119	0.9541	3.17	0.47	9.4	-1	9	2
2	12852	10.4	0.21	0.7	64.2	0.596	261	142	1.025	3.37	-0.87	10.1	0	7	1
4	12856	7.4	0.08	0.58	48.9	0.022	295	-191	0.9928	3.13	0.01	11.5	0	8	2
4	12857	0.4	0.2	0.31	6.85	0.053	-198	211	0.9959	3.31	0.59	10.4	-1	8	2
5	12858	5.1	0.25	1.71	7.7	0.0198	46	182.6	0.9698	3.35	0.43	10.3	1	6	4
2	12861	7.4	0.16	1.49	52.9	0.056	-185	168	0.9982	2.9	-1.33	8.7	0	8	1
4	12869	18.2	-1.27	0.59	22.6	0.147	38	132	0.9933	3.37	-0.27	9.1	0	8	2
2	12876	4.7	1.09	-0.66	20.4	-0.541	17	-11	0.9462	4.58	0.6	11.8	2	5	1
3	12877	5.7	-0.15	0.15	11.82	0.05	20	360	0.9618	3.31	0.6709	2.4	0	6	2
2	12879	1.1	0.34	0.6	1.4	0.032	228	392	0.9921	3.07	0.52	9.8	1	8	1
3	12882	12.5	-0.52	0.34	1.3	0.469	-61	108	0.991	3.36	0.45	14	1	8	2
6	12883	-1.1	0.32	0.41	0.9	0.04448	213	159	0.9752	3.09	1.54	16.37	-1	7	4
2	12887	9.5	0.49	0.36	2	-0.537	146.5	314.5	0.9924	3.24	-0.9	11	-1	8	1
4	12889	-10.9	0.22	0.34	-54	0.06435	-73	-127	0.9799	2.96	0.5183	4.8	0	8	2
5	12891	6.8	0.17	1.31	2.078	0.039	3	530	0.9924	3.28	1.44	10	1	6	3
5	12894	6.5	0.18	-1.02	1.7	-0.213	30	-182	1.02	3.49	0.3	10.2	-1	7	3
2	12895	16.6	0.68	0.37	1.6	0.049	7.25	193	1.026	3.16	0.48	13.8	0	8	1
5	12899	-14.1	0.24	0.89	-106.9	-0.12	218	467	0.9537	3.24	-2.46	9	1	7	3
5	12905	6.5	0.94	0.06	17.1	0.128	29	44	0.9949	3.31	1.46	14	2	7	4
2	12913	4.4	0.84	0.18	5.8	0.1001	32	443	1.043	3.52	0.66	12.3	0	7	1
4	12916	6	1.01	1.92	50.6	0.408	171	149	0.9937	3.652	0.82	11	0	7	2
2	12917	6.6	0.76	-0.04	1.4	0.656	34	421	0.9572	3.17	0.38	10	0	7	1
5	12925	6.2	1.49	-0.22	-31.5	0.036	-185	-147	0.9894	3.71	3.43	12.8	-1	7	3
5	12934	6	-0.77	2.89	6.3	-0.545	143	174	0.9713	3.69	1.21	9.8	1	7	3
5	12939	8	0.44	1.1	12.4	0.308	-142	-35	0.9991	3.61	0.64	9.2	1	9	3
4	12943	1.7	0.3	0.2	1.1	0.077	48	166	0.9944	4.31	0.54	8.7	1	6	2
5	12950	7.7	0.57	0.03	16.8	0.474	-11	211	0.9755	2.954	0.58	14.5	1	8	3
2	12961	-11.4	1.29	1.97	24.9	0.066	10	126	1	3.12	1.18	14.5	-1	13	1
2	12963	4.4	1.555	0.78	-38.9	0.075	226	415	1.041	3.49	1.09	9.3	0	8	1
6	12973	5.2	-0.99	0	1.8	0.05	-228	51	0.9728	3.68	0.79	18.1	1	6	4
4	12979	5.8	1.28	0.27	1.6	0.062	-185	-150	0.9918	2.28	0.81	6.7	0	6	2
4	12980	8.3	0.95	0.96	2.6	0.675	235	192	0.9627	3.4	0.53	13.8	-1	9	2
4	12981	7.4	1.7	0.36	53.6	0.821	-113	178.9	0.9968	1.71	-0.13	9.1	-1	8	2
2	12982	9.2	1.14	0.39	0.9	-0.226	15	-390	1.029	2.96	0.28	10.4	1	10	1
2	12992	9.3	0.49	0.36	1.7	-0.125	3	305	0.9719	2.21	1.12	4.4	1	10	1
2	12994	-5.2	-0.435	0.18	2.1	-0.174	5	30	0.9967	3.4	0.37	9.8	0	9	1
4	12999	7.8	0.6	-0.6	-39.4	0.069	32	73	0.9737	2.49	0.57	10	-1	10	2
4	13002	5.7	0.24	0.24	40	0.498	190	121	0.9579	3.13	0.36	10	0	7	2
4	13004	3.7	-0.485	1.5	-51	0.044	-233	-76	0.9971	4.44	-1.13	9	0	8	2
2	13010	6.4	-0.66	0.07	6.7	0.254	10	-121	1.029	2.97	0.3507	10.56	1	7	1
4	13013	8	1.25	-0.75	9.7	0.357	15	323	0.9941	2.08	0.36	10	0	9	2
4	13015	6.6	0.27	0.29	23.6	-0.344	73	-226	0.968	3.89	1.92	9.8	1	7	2
4	13019	6.3	0.34	1.33	14.7	-0.414	49	-156	1.004	3.23	0.46	9.992	2	7	2
2	13030	20.6	1.29	0.03	28.5	0.076	21	143.7	1.028	3.215	0.68	11.04	-2	8	1
5	13031	6.7	0.11	0.34	39.2	-0.134	41	-80	0.9962	3.42	0.5997	10.8	1	7	3
2	13036	7	0	0.8	36.3	0.036	44	132	1.042	3.34	0.11	9.4	1	7	1
4	13037	11.4	0.26	0.38	1.5	0.061	-190	120	0.9919	2.44	2.12	4.1	1	8	3
5	13042	7.8	0.68	1.91	1.7	-0.19	104	283	1.033	2.54	0.64	8.5	2	8	3
2	13054	-1.5	1.16	-0.83	-36	-0.544	115	110	0.9525	2.26	-0.63	13.33	-1	7	1
5	13060	5.3	0.32	-1.47	3.7	0.043	22	-60	0.9937	2.15	1.99	10.4	1	6	3
4	13072	10.3	1.54	3.37	4.5	0.113	22	-132	0.998	3.28	0.9148	11.5	0	11	2
2	13073	14.8	0.59	1.11	32.5	-0.174	4.475	334	1.04	5.11	0.4786	16.2	0	7	1
5	13079	4.9	0.15	1.94	-41.8	-0.383	-109	253	1.008	2.98	0.39	17.7	1	7	3
4	13081	8.4	-0.25	1.26	1.2	-0.342	-92	467	0.9455	2.07	-1.41	9.5	-1	8	2
2	13086	6.8	0.51	-0.07	54.7	0.074	9	-16	1.031	3.68	0.5722	9.5	0	7	1
4	13087	-0.6	1.02	0.27	2.4	-0.397	199	-249	1.045	2.65	-0.18	9.2	0	8	2
2	13090	6.6	1.36	-0.67	-60.8	0.07	287	467	0.999	1.86	0.82	8.1	0	7	2
2	13098	4.8	0.27	0.25	59.4	0.053	54	202	1.008	3.22	0.56	9.3	0	7	1
2	13100	7.3	-1.06	0.27	-47.6	0.047	16	79	0.9917	3.07	0.46	5.2	0	8	1
2	13105	8.3	0.42	0.62	19.25	0.04	41	-146	1.012	2.98	0.67	9.7	0	9	1
2	13106	6.4	0.25	0.3	5.5	0.208	15	388	0.9966	3.14	-2.4	5	0	7	1
4	13107	6.2	0.06	0.25	-33.3	0.24	35	-313	1.032	2.35	0.44	11.8	0	7	2
5	13113	12.8	1.46	0.28	27.2	0.038	85	153	0.9909	3.33	-0.21	12	2	7	4
5	13115	5.9	0.12	0.27	-24.5	-0.469	40	507	0.9923	3.15	0.68	12.1	0	6	3
2	13117	-5.5	0.58	1.67	-55.85	0.058	8	22	1.036	5.37	0.49	15	-1	8	1
4	13118	19.4	0.22	0.27	87.6	0.057	45	586	0.993	3.305	0.44	9.9	-1	8	2

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	13240	6.6	0.72	0.89	0.8	0.462	-55	-306	0.9776	2.65	0.37	7.8	1	7	2
5	13249	5.9	0.5	0.49	-1.871	0.054	187	-39	0.9948	3.43	0.5	9.2	1	6	3
4	13250	10.7	0.59	-0.76	2.3	0.082	-111	712	0.9974	4.29	1.09	10.2	-1	8	2
4	13256	-1.8	-1.725	0.34	50.5	0.157	97.5	-5	0.9934	3.18	1.49	10.9	0	8	2
2	13261	27.4	0.185	0.14	-6.2	0.544	47	421	0.984	3.55	0.44	14.25	0	6	1
2	13263	9.6	-0.78	0.61	1	0.028	190	24	0.9926	2.91	0.04	15.8	0	10	1
4	13268	2.4	0.05	0.19	4.9	0.055	267	127	1.017	4.26	0.41	6.3	1	7	2
4	13275	3.3	-0.23	-0.55	-23.5	0.077	221	-445	1.038	3.36	1.06	9.1	1	8	2
5	13277	-2.2	0.53	0.33	13.7	0.395	-10.21	-93	0.9902	2.56	-1.16	12.8	1	8	3
4	13283	6.8	0.63	1.27	1.9	0.215	87	108	0.9438	4.06	0.45	14.6	0	7	2
2	13284	7.1	1.13	-0.05	2	0.047	400.5	307.5	1.032	3.24	0.08	10.7	0	8	1
2	13285	15.2	1.06	0.3	-0.3	0.037	29	159	1.039	5.21	0.42	11.74	0	8	1
5	13286	12	0.36	1.98	-11.8	1.161	-3	63.54	1.02	3.4	0.43	11	0	8	3
2	13287	6.6	-0.07	-0.02	66	-0.333	-109	-94	0.9693	2.54	0.55	2.7	-1	7	1
2	13290	-1	0.35	0.35	6	-0.088	31	344	1.039	3.1	0.47	9.4	0	7	1
2	13291	7.5	-0.68	-1.37	-24.1	0.117	-235	255	0.9963	3.38	0.4538	9.2	1	8	1
5	13294	-2.2	-0.39	1.11	-1.1	-0.043	175	-274	1.003	2.09	1.46	18.4	1	8	3
4	13295	7.7	0.3	0.34	42.2	-0.332	-232	-182	1.024	3.18	0.34	6.7	-1	8	2
4	13303	12.4	-0.34	0.17	17.75	0.335	-122	553	0.9992	3.87	1.55	8.8	-1	7	2
2	13306	7.8	1.34	1.85	3.2	0.027	28	786	0.9475	2.96	-0.01	11.3	-2	9	1
4	13311	5.8	0.29	0.05	0.8	0.272	11	363	0.9924	3.36	0.35	14.8	1	6	2
2	13322	13.1	0.71	-1.55	-46.6	0.094	178	-299	1.031	3.47	2.27	9.4	0	8	1
2	13331	19	1	0	2.6	1.106	25	55	0.9968	4.93	0.68	9.82	0	9	1
4	13337	13.4	-1.82	1.79	-26.6	0.385	40	199	1.007	3.2	0.26	20.9	1	6	2
2	13344	7.3	-0.13	0.43	95.7	0.048	52	409	0.9698	4.5	-1.33	9.606	0	8	1
4	13362	5.6	-0.73	-0.83	20.3	0.027	37	150	0.991	3.3	-1.15	13.9	1	6	2
2	13364	6.8	0.28	0.43	7.6	-0.653	-257	129	1.053	3.08	1.37	12.5	-1	8	1
4	13366	6.8	0.33	0.31	64.6	0.045	25.73	-279	1	3.06	0.55	15.1	0	7	2
4	13368	18.3	0.41	-0.92	4.7	0.023	82	110	1.007	2.21	-1.14	12.5	-1	7	2
2	13370	8.5	0.44	0.5	52.2	0.369	-63	311	0.9963	1.05	1.1	13.5	-1	9	1
5	13377	-6.4	0.34	0.28	-11.7	0.166	-26	457	0.9968	2.89	0.49	11.7	1	8	3
2	13378	8.9	0.29	0.34	-14	0.037	10	557	0.9962	1.93	-0.23	14.2	-1	9	1
2	13388	11.1	0.32	-0.54	2.2	0.415	159	-347	1.003	2.89	1.44	11.1	0	11	1
4	13392	6.3	1.28	0.3	5.741	0.463	23	120	1.016	3.24	0.47	14.5	1	7	2
4	13398	6.4	1.07	0.32	1.9	0.04	234	-215	0.9703	3.68	-0.52	11.8	1	7	2
4	13403	-2.7	0.21	-1.2	-44.1	0.033	55.42	684	0.954	2.63	0.35	10.5	1	8	2
4	13404	15.3	1.04	0.38	16.05	0.058	16	19	0.9648	3.38	2.01	9.2	1	7	2
4	13409	7.4	-0.38	-2.95	-37.4	0.561	264	458	0.9991	3.06	0.57	9.9	0	8	2
5	13416	12	0.4	1.94	1.3	-0.388	162	149	1.052	4.18	0.96	8.7	2	8	3
2	13422	22.1	0.17	1.22	58	-0.133	11	-453	1.023	3.32	-0.78	15.7	0	11	1
4	13427	-2.1	0.93	0.25	-32.9	0.048	152	-23	0.9966	1.48	0	9.5	0	8	2
5	13433	2.4	-1	0.28	2.5	-0.554	-239	109	0.9921	4.04	-1.29	11.6	1	7	3
4	13438	8.8	1.28	0.33	30.3	0.456	16	-292	1.001	3.14	1.36	14.7	-1	9	2
5	13441	7	0.28	-0.56	-51.5	0.05708	32	141	1.082	3.38	0.53	0.3	1	8	4
5	13449	12.4	0.89	0.28	73.95	0.041	29	199	0.9942	2.06	-1.31	14.4	1	7	3
2	13450	6.7	-0.1	0	5.788	0.471	148	75	0.9955	3.15	1.83	9.739	1	7	1
2	13453	13.3	0.21	0.24	6	0.042	-117	123	0.993	3.14	-1.29	12.3	-1	8	1
2	13460	-2.9	0.41	0.63	26.7	0.039	185	179	0.9979	3.08	0.44	9.845	1	9	1
4	13461	6.4	-0.44	0.45	3.5	-0.041	118	180	0.9942	1.88	-0.68	7.8	1	7	2
4	13465	20	0.83	0.42	-30.2	-0.097	10	-188	0.9679	3.32	0.46	9.5	0	8	2
4	13468	13.8	0.75	-0.96	6.8	-0.435	44.5	234	0.9972	5.44	-2.33	10.2	1	8	2
4	13481	7	0.36	0.21	64.7	0.378	20	371	0.9708	4.39	1.49	5.2	0	8	2
2	13485	7	0.29	3.76	3.8	-0.094	37	-109	1.015	3.47	1.65	9.4	-1	8	1
5	13487	5.9	-0.1	0.56	-38.3	0.06674	258	102	0.9923	3.24	-1.94	10.5	1	8	3
4	13490	10.1	-0.46	0.92	1.2	0.06	19	464	0.99	3.25	0.4462	7.9	0	7	2
2	13493	15.5	-0.14	0.44	-20.8	0.034	113	-10	0.9502	2.22	2.03	10.54	0	7	1
2	13497	-14.6	0.7	-0.64	-29.5	0.081	38	430	0.9882	3.08	1.89	10.3	-1	7	1
4	13508	6.5	0.22	0.19	7.6	-0.422	16	115	0.9937	4.04	0.44	10.3	1	7	2
2	13516	18.5	0.91	0.11	81	0.172	12	31	0.9979	3.4	0.7613	9.9	0	10	1
4	13525	17.9	-1.31	0.01	2.3	-0.438	197	19	0.996	4.17	0.87	9.1	0	11	2
5	13533	7.3	1.08	1.39	23.1	0.03804	-185	424	0.9938	4.05	0.58	4.5	0	8	4
4	13535	15.7	-0.5	0.53	4.9	-0.475	-130	101	0.9768	3.19	0.503	10.2	0	7	2
4	13538	14	0.2	0.3	15	0.546	23	166	0.9948	3.62	2.18	13.6	0	8	2
2	13545	-0.3	0.27	0.19	14.2	0.085	21	561	0.9447	2.24	0.7926	9.5	1	7	1
5	13566	7.7	0.25	0.43	57.3	0.231	306	115	1.043	4.14	-0.91	8.6	-1	8	3
2	13581	13	0.24	0.36	5.2	0.524	49	-253	0.9942	2.89	0.37	10.8	0	8	1
2	13584	-4.7	0.72	1.7	0.8	0.029	26	77	1.025	5.66	0.51	14.2	-1	6	1
2	13588	5.6	0.27	-0.18	0.9	0.025	-215	49	0.9512	3.402	0.95	13.1	-1	6	1
2	13596	16	1.66	-0.6	6.2	0.059	-70	136	1.036	3.3	0.49	12	0	7	1
4	13600	6.3	-0.635	2.53	-3.7	0.04	37	288	1.007	3.8	-0.1	6.3	2	7	3
4	13604	6.4	1.53	-1.36	27.3	0.463	17	-137	0.9987	3.23	0.44	12.2	0	7	2
2	13608	6.6	0.46	0.23	-50.4	0.222	19	184	1.021	3.11	0.38	9	1	8	1
1	13611	-11.5	0.4	1.23	12.9	0.033	-64	186	1.02	3.08	0.49	-3.6	0	7	1
2	13612	6.4	0.85	0.98	2	-0.358	21	191	0.9923	4.03	1.63	9.6	0	7	1
4	13615	6.1	-0.285	-0.16	60.5	0.056	77	172	0.9954	3.64	0.73	5.4	0	8	2
4	13616	14.5	1.63	1.19	6.7	0.037	15	60	1.044	3.95	-0.17	2.2	0	8	3
4	13618	-0.8	1.77	1.69	-27.9	-0.621	177	65	0.976	5.27	-0.51	12.7	0	8	2
4	13625	21.1	0.65	3.59	64.6	0.05	26	203.9	0.9478	3.33	0.53	9.1	1	8	2
5	13628	7.1	0.44	0.62	11.8	0.493	52	276	1.049	3.62	0.46	8.7	-1	8	3
2	13629	8.9	1.1	1.22	1.9	0.494	-212	16	0.9948	3.35	0.7	9	0	10	1
5	13630	-2	0.2	0.38	-47.2	0.034	105	104	0.9887	2.07	0.52	15.9	1	7	3

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	13770	11.4	0.35	0.36	1.6	0.038	163	-288	1.018	3.25	2.24	5.3	0	9	1
4	13774	8.8	0.56	0.28	7.7	0.053	37	551	0.9949	3.06	0.5	2	1	7	3
2	13787	29.3	0.04	0.26	21.35	-0.019	52	495	0.9904	2.33	1.77	11.5	0	9	1
2	13791	7.5	0.36	0.59	2.2	0.152	-563	18	0.9601	3.04	1.05	0	1	12	1
2	13802	1.1	1.51	0.57	2.3	0.201	-250	-176	1.063	3.36	0.55	11	-1	8	1
2	13807	7.3	0.365	0.49	65.8	0.163	-18	42	1.033	2.5	0.78	11	0	8	1
2	13808	7	0.24	2.06	6.6	0.029	17	227	0.9965	3.03	0.61	9.5	-2	8	1
4	13809	8.5	0.23	-0.31	-34.7	0.035	321	110	1.007	3.07	-0.69	6.4	1	9	3
4	13810	3.4	0.38	1.84	59.3	-0.048	5	12	1.033	3.36	0.7267	12.4	0	8	2
4	13822	16.7	0.615	1.35	5.8	0.315	7	28.62	0.9646	3.74	0.09	3.2	1	14	3
4	13823	-2.9	0.28	-0.35	16.9	0.044	231	-227	1.004	3.35	2.15	10.7	-1	6	2
4	13825	7.7	-0.06	-0.63	-43.6	-0.209	29	131	1.038	3.68	0.44	11	0	8	2
5	13826	3.2	0.16	0.35	-7.3	0.635	-109	147	0.9935	2.96	0.36	10	1	9	3
4	13833	17.1	1.45	-0.93	1.1	0.034	36	84	0.9914	3.05	0.55	11.6	0	10	2
4	13837	8.2	0.3	1.78	12.4	0.043	52	154	0.9945	3.04	2.11	12	-1	9	2
4	13842	17	0.66	-0.49	-5.1	0.031	-47	122	0.9932	3.03	0.52	10.3	0	9	2
4	13846	13	0.47	0.49	4.3	0.085	6	-7	0.9828	2.61	-0.76	15	0	14	2
5	13852	1.4	0.78	0.45	-24.8	0.16	370	124	0.9953	2.93	-0.09	10.8	1	11	3
2	13853	11.8	-1.09	1.29	2.1	0.102	304	-42	0.99	2.61	0.57	12.9	-2	10	1
4	13858	9.7	0.36	0.26	56.7	0.081	236	79	0.9706	2.84	0.78	11.4	-1	9	2
4	13860	1.5	0.21	0.83	1.8	0.254	-101	222	1.04	3.46	0.44	11.2	0	7	2
2	13866	5.7	0.22	1.52	3.5	0.04	27	211	0.961	3.9	0.36	13.3	0	6	1
2	13886	7.6	1.73	0.29	2.1	0.075	272	-124	0.9576	3.46	0.6263	4.8	0	8	1
5	13887	4.8	0.61	0.4	4	0.073	235	69	0.9979	3.22	-0.4	9.5	1	10	3
2	13890	-1.1	1.76	0.34	-63.5	-0.198	30	133	0.9954	2.78	0.44	9.8	2	7	1
4	13891	-9.1	-1.9	0.32	-1.867	0.549	257	117	1.027	2.3	0.54	15.7	-1	7	2
2	13893	7.6	1.71	0.34	21.3	-0.131	18	427	0.9908	3.06	1.53	12.4	-1	8	1
5	13902	9.2	-0.59	-1.25	37.7	0.053	-10	175	1.008	3.2	1.05	11	2	8	3
3	13903	12	0.15	0.44	12.6	0.499	65	875	0.9969	3.26	0.6377	3.8	0	7	2
4	13908	-2	0.54	1.95	2.4	0.581	265	301	1.001	4	0.71	8.9	1	11	2
2	13912	18.7	0.27	1.04	3.6	0.036	44	340	1.019	2.15	-0.11	9.6	-2	7	1
4	13924	5.9	1.2	0.1	21.4	-0.42	-98	-61	0.9745	2.84	0.92	6.5	1	7	3
2	13928	7.8	0.34	0.12	-51.7	0.024	-238	231	0.9908	3.11	0.41	12.1	0	8	1
2	13929	9.8	-0.4	0.3	-6.2	0.054	108	152	1.024	3.1	-1.97	9.5	1	7	1
4	13938	1	1.32	-0.49	-7	-0.459	200	189	0.9986	2.94	0.99	9.4	1	7	2
2	13939	7.7	-0.2	0.34	6.5	0.23	-265	192	0.9908	2.75	0.7089	7.7	-1	8	1
5	13941	8.5	-0.53	1.27	9.2	0.032	-193	61	1.004	3.06	-0.46	11.5	1	9	3
2	13951	10.2	0.44	0.88	6.2	-0.166	-210	505	0.9677	3.03	0.51	9	1	12	1
4	13962	-4.8	0.17	-0.35	-104	0.578	109	-253	0.9485	3.4	0.1	11	-2	8	2
2	13964	6.2	1.6	-0.23	1.2	0.539	147	95	0.9869	3.24	0.89	11.8	-1	7	1
4	13967	3	0.31	0.27	11.1	-0.018	23	-304	0.994	3.41	0.54	11.7	-1	8	2
5	13971	4.3	1.37	0.4	1.5	0.037	143	107	0.9804	3.46	1.12	18.2	-1	7	3
4	13972	-0.2	0.3	-1.12	27.6	0.025	37	107	0.9916	3.31	1.23	5.7	0	7	3
5	13975	12	-0.11	0.76	-40.2	-0.141	-249	-2	0.9526	1.93	-0.34	13	2	13	3
2	13977	-4.6	0.24	-0.81	56.8	0.034	95	-140	0.9977	3.2	1.07	9	0	8	1
5	13979	5.1	0.26	0.05	1.1	0.915	46	-209	0.9552	3.35	0.43	11.2	0	6	3
2	13983	6.6	0.37	1.72	-28.4	0.613	-4	210	1.023	3.15	0.01	11.13	-1	7	1
4	13984	7.6	0.4	0.09	-38.7	-1.011	6	19	0.9788	3.99	0.82	11.7	0	11	2
2	13987	8.1	0.02	-0.84	7.9	0.034	17	-241	1.014	4.08	0.31	7.3	0	7	1
5	13994	6.1	-0.48	1.04	9.8	0.644	33	152	0.9809	3.31	0.3922	18.8	0	7	3
2	13999	10	0.22	1.28	17.6	0.054	178	-200	0.9948	3.83	-1.14	10.1	0	7	1
4	14003	6.8	-1.7	0.22	6.2	-1.089	41	190	1.016	3.18	0.51	9.2	2	7	2
4	14008	9	-0.26	0.03	65.2	-0.482	-234	157	0.995	4.46	1.78	10.1	1	6	2
4	14011	17.7	0.19	0.59	13.6	0.18	60	-57	0.9989	3.17	0.4851	8.7	2	9	2
2	14012	9.3	-0.92	0.35	1.7	0.05	257	178	1.001	3.16	-1.05	10.2	0	10	1
4	14016	-4.2	0.35	1.58	13.8	0.048	-183	103	0.9679	3.28	-0.36	5.7	-1	7	2
2	14017	7	-0.38	1.87	21.9	0.066	24.98	10	1.023	3.33	0.77	11	0	8	1
4	14020	16	0.41	-0.02	-96.7	-0.369	-169	118.2	0.9618	3.244	0.64	10.1	0	8	2
5	14027	12.4	-1.04	0.49	-13.8	0.046	87	-38	1.038	3.244	-0.12	13.9	1	8	3
4	14038	6.4	1.49	0.49	7.5	0.054	-238	-139	1.046	4.07	3.38	15.4	0	7	2
5	14040	-17.2	0.3	1.94	-35.2	-0.078	114	531	0.9945	3.21	-1.24	9.9	1	8	3
2	14042	-0.6	0.59	0.24	7.4	0.044	142	308	1.03	3.97	2.08	4.8	-1	6	1
4	14055	18.4	-0.58	0.33	-42.6	0.059	-207	84.52	0.9869	2.69	2.22	10.1	1	7	2
4	14057	6.6	0.26	-0.69	126.5	0.239	56	-28	0.9906	4.51	0.3	18.2	1	7	2
5	14060	7.3	0.18	1.38	-22.3	0.046	28	-262	1.042	3.59	-0.06	9.4	1	8	3
4	14081	7.2	0.23	0.25	18.8	0.177	219	161.3	1.056	3.11	-0.17	11.6	-1	8	2
4	14091	5.3	0.34	-0.43	27	0.041	43	542	0.9928	3.91	0.68	6.8	0	7	2
4	14111	6.6	0.56	-0.37	-1.8	-0.071	183	107	0.9457	2.51	0.51	11.3	-1	7	2
5	14117	-2.3	0.16	-0.08	-14.1	0.037	18	102	0.9923	3.62	-0.24	11.27	1	7	3
4	14121	11.2	0.2	0.39	16.5	0.304	-225	149.2	1.036	4.19	0.44	10.25	0	8	2
5	14122	8.3	0.4	1.29	16.3	0.1137	28.5	190	0.9964	1.92	1.86	12.3	1	7	3
4	14125	18.6	0.01	1.69	30.6	0.07	25	402	0.9745	3.05	-0.25	9.2	0	7	2
2	14129	7.8	0.43	0.32	29.7	0.08	29	161	0.9974	2.02	0.64	14.5	0	9	1
2	14135	8.8	0.61	0.3	2.8	0	78	-321	0.9976	3.26	0.51	9.3	-1	10	1
5	14148	8.3	-0.14	1	13	0.045	11	160.3	0.9286	4.2	0.55	10.9	2	9	3
4	14157	6.9	0.13	0.86	6.596	0.035	157	138	1.044	2.88	0.76	10.33	0	7	2
2	14161	7.3	1.71	0.09	-0.5555	0.39	10	505	0.9565	3.3	0.67	16.4	0	8	1
5	14163	7.1	0.685	0.35	119.3	-0.364	9	638	0.9963	2.39	0.2624	3.1	0	8	1
5	14172	6	-1.4	-1	12.2	-0.242	25	97	1.003	1.93	0.6049	11.3	-1	7	3
5	14180	6.1	0.51	0.16	-32.7	0.069	313	-158	0.9902	2.83	0.74	16.7	1	7	3
4	14182	-1.6	1.03	0.3	-19.5	0.025	47.7	128.3	0.991	3.11	1.25	11	1	7	2
4															

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
4	14316	17.6	-0.47	-0.27	32.1	0.03	32	150	0.9936	2.51	0.31	12	0	7	2
5	14319	0.9	0.08	0.44	14.1	0.053	-500	185.4	1.001	2.75	-0.07	9.1	1	9	4
2	14322	7.8	0.46	0.26	-43	0.1036	-231	53	0.9981	3.43	1.42	9.2	1	9	1
4	14323	7.9	-2.36	-0.26	-114.3	0.027	316	92	1.025	5.26	0.4046	15.8	-1	9	2
5	14325	-10	0.3	1.24	60.1	0.237	52	-44	1.024	3.3	0.33	14.4	2	9	3
4	14327	-3.6	0.78	-1.12	41.9	0.036	28	-77	1.039	3.24	0.77	6.1	0	8	3
5	14329	6.9	1.34	-0.7	-19.3	0.23	40	461	1.065	2.98	0.47	11.8	0	8	3
2	14341	0.1	-0.98	1.12	-50.6	0.046	193	208	0.9749	3.23	-0.28	9.8	0	8	1
5	14342	19.6	0.22	0.28	14	0.583	83	197	0.9981	3.14	0.98	16.3	1	9	3
5	14346	6.2	1.78	0.24	6.1	0.032	260	86	0.9545	1.9	1.87	12.7	1	7	4
4	14351	7.6	0.1	-1.13	1.2	0.481	33	-258	0.9909	3.06	0.68	16	0	8	2
2	14354	7.3	0.27	0.32	-119.6	0.859	23	72	0.9964	2.14	-0.72	10.5	0	8	1
4	14355	7.4	0.59	-0.89	4.4	-0.127	6	-121	0.9974	3.38	0.5	6.8	0	8	2
5	14358	7.1	0.28	1.94	8.5	0.03	359	223	1.042	4.48	0.46	10.01	2	8	3
2	14359	8.7	0.45	0.4	55.6	0.067	-75	100	0.9499	3.05	0.6099	14.5	-1	10	1
4	14364	7.5	0.32	-0.46	-112.1	-0.502	111	-165	0.9861	3.15	-0.23	12.8	0	8	2
2	14374	6.6	-0.715	0.24	-16.4	0.412	-222	140	1.019	3.36	1.07	10.46	-2	7	1
2	14376	8.5	0.585	0.18	2.1	-0.42	-0.37	30	0.9967	3.2	1.45	12.9	-1	9	1
2	14382	-3.4	0.39	1.53	26.7	0.02	38	312	1.02	3.18	2.1	12	0	8	1
2	14384	-1.6	-0.58	0.3	-33.1	0.051	366	552	0.9976	4.2	0.62	9.621	0	8	1
4	14393	-17.5	0.24	-0.57	7.3	0.19	-61.13	-1	1	3.12	0.5	5.8	0	7	2
2	14398	10.9	0.27	-0.98	6.7	-0.317	61	230	0.9661	2.82	0.4	9.4	0	7	1
5	14403	2.6	1.43	0.75	-34.6	0.042	183	61	0.9914	3.22	0.54	10.8	0	7	3
2	14406	10	-0.33	0.14	4.402	0.071	83.62	373	1.032	3.16	-0.61	7.9	0	11	1
4	14408	6.3	0.31	0.3	35.9	0.03822	345	212	0.9962	4.16	0.55	16	0	7	2
5	14411	-3.2	-0.68	1.76	-41.1	0.025	43	117	0.9928	3.46	1.23	9.7	1	7	3
4	14414	5.8	0.23	0.2	2	-1.15	39	426	0.9923	2.22	-0.13	16.2	0	6	2
2	14418	6.8	-0.64	0.36	1.4	0.08236	-122	105	0.9912	3.23	0.6	8.9	-1	7	1
4	14423	-10.2	-0.5	1.79	-41.4	0.098	13	110.3	0.9966	3.03	0.22	15	0	8	2
4	14442	7	0.36	-0.16	104.5	-0.006	67	-101	0.9915	2.84	0.55	6.3	0	8	3
4	14443	-0.9	0.25	3.45	69.45	0.492	52	161	0.9986	3.88	0.44	14.7	0	7	2
4	14444	16.1	1.65	0.22	6.2	0.025	36	30	1.027	2.29	0.6	13.8	-1	7	2
5	14446	13.3	-1.06	0.29	-44.6	0.132	39	118	1.066	3.05	0.7594	9.1	-1	7	3
2	14455	5.8	1.56	0.68	7.3	-0.118	-62	145	0.9944	3.15	-0.61	10	0	6	1
5	14456	-4.2	0.225	0.46	-52.4	-0.423	188	118	0.989	3.57	0.4	12.8	0	5	3
4	14458	7.7	0.11	0.81	14.05	0.369	-325	-208	0.9963	3.67	0.59	11	0	8	2
3	14464	7.1	0.68	1.33	5.904	0.324	-211	104.8	1.034	2.43	0.38	0.2	1	8	2
5	14466	8	0.71	0.36	-9.5	0.608	50	151	0.9632	2.97	0.63	10.3	1	9	3
2	14467	7.9	0.24	1.49	-100.6	0.046	-186	-54	0.9908	2.65	1.08	11.4	0	7	1
4	14469	25.9	-0.15	-0.91	21.1	-0.07	31	257	0.9585	4.39	1.14	6.7	-1	9	3
5	14483	9.7	0.815	0.15	2.6	-0.356	80	210	1.036	4.46	0.62	17.3	1	9	3
2	14484	0.5	0.475	1.35	14.4	0.055	146	131	0.9932	2.97	0.29	5	0	7	1
2	14490	7	1.53	0.32	53.8	-0.21	-7	-98	0.9958	3.21	0.34	10	0	7	1
4	14491	6.8	1.51	2.79	1.8	0.118	13	20	0.9761	3.42	-0.29	11.3	-2	8	2
2	14494	6.8	0.22	0.31	29.5	-0.215	33	330	0.8927	3.47	0.39	13.8	0	7	1
4	14496	-4.3	0.26	0.18	64.5	0.031	40	114	1	5.55	0.4	11.4	0	6	2
2	14503	15.3	1.13	0.09	117	0.123	14	31	0.9968	2.24	0.67	10.24	-1	7	1
2	14504	0	0.28	0.37	4.3	0.039	26	99	0.992	3.83	-0.09	5.8	0	8	1
4	14505	7	0.16	0.94	58.3	0.045	-97	-25	0.9958	2	2.47	8.4	-1	7	2
4	14506	8.2	-0.97	-1	9.6	0.507	53	154	1.043	3.24	1.58	5.5	0	9	2
2	14507	7	1.01	-0.14	1	0.486	8	119	0.9923	3	-0.34	10.78	0	8	1
2	14512	10.6	-0.41	0.3	4.2	0.066	38	151.6	1.027	5.66	-0.14	9.1	-1	8	1
4	14520	0.5	-1.27	0.26	1.4	0.48	40	196	0.9941	2.82	2.15	10.8	1	7	2
2	14527	19.2	3.11	-1.18	-107.6	0.354	193	128	1.011	2.19	1.61	8.6	-1	8	1
5	14531	-4.2	0.03	-0.23	-21	0.036	49	-637	0.9503	4.43	0.27	14.9	1	8	3
2	14532	7.5	1.7	1.14	14.8	0.039	62	-178	0.9982	3.64	0.8436	10.2	0	8	1
2	14535	5.4	0.77	2.46	53.1	0.043	-44	-566	0.9588	3.17	0.39	4	-1	7	1
2	14543	9.6	1.22	0.26	1.8	0.515	-68	133	0.9883	4.36	0.38	5.5	0	8	1
4	14554	5.6	0.13	0.27	4.8	0.028	267	114	0.9948	3.424	-0.57	9.2	0	6	2
5	14556	6.4	0.68	0.26	-56.6	0.069	301	293	0.9933	3.18	0.4	9.3	2	7	3
4	14557	6.4	-0.83	-0.9	-7	0.252	21	49	0.9974	4.37	-0.25	9.8	0	7	2
2	14561	-8.8	0.29	0.88	-8.6	0.214	58	3	0.9995	3.3	1.61	11.1	-1	8	1
5	14562	5.6	0.16	0.46	36.3	0.03812	142	115	0.9909	3.36	0.5	10.4	-1	6	3
2	14567	14.5	0.615	-0.79	1.4	0.068	-73	154	0.9846	3.2	0.48	7.8	-2	8	1
2	14568	12.3	0.07	-0.13	1.3	-0.227	-48	109	0.9894	4.05	-0.9	10.77	-2	7	1
5	14574	17.8	0.92	2.1	1.3	0.029	-258	722	0.9903	1.89	0.42	11.9	-1	7	3
2	14575	6.1	0.16	0.37	1.1	0.031	-148	106	0.9922	4.69	0.72	8.1	0	7	1
5	14579	8.1	0.545	0.18	1.9	-0.5	-73	35	0.9972	4.12	-1.05	9	-1	9	3
4	14581	6.9	0.28	0.41	-52.9	0.05	10	136	0.993	3	1.54	7.8	0	8	2
2	14582	6.5	0.28	0.34	67.5	-0.342	30	133	0.9954	3.11	0.353	9.8	-2	7	1
2	14586	6.6	0.34	0.4	65.9	-0.109	68	-66	0.9949	3.15	-0.16	6.55	0	7	1
2	14591	7	0.55	1.52	5.6	0.06	-527	121	0.9674	3.34	-0.96	19.6	0	8	1
2	14598	9.7	0.3	-0.6	66.75	0.057	65	239	0.9803	2.47	0.53	9.1	0	7	1
2	14599	3.5	0.19	0.14	1.3	0.1359	-245	-595	1.011	2.58	3.87	12.1	0	6	1
2	14600	17.2	0.21	1.69	1.2	0.378	-27	458	1.018	3.2	0.37	15.8	-1	9	1
5	14612	9.8	0.41	0.22	7.3	0.466	-422	526	0.9986	3.2	-0.1	11.24	0	7	4
2	14613	6.7	-2.35	0.22	8.8	-0.483	-185	103	1.039	3.22	1.34	9.4	-1	7	1
5	14624	14.9	0.22	0.24	2.1	0.078	1	406	0.9653	3.41	0.87	15.5	1	10	3
2	14626	-4	0.23	0.88	43.4	0.205	47	375	1.033	2.94	0.53	14.5	0	8	1
5	14630	6.7	0.18	1.75	10.2	-0.334	29	155	0.9567	2.87	0.45	11.39	0	7	3
2	14633	8.9	0.34	-0.44	115.5	0.235	13	176	1.04	3.14	0.81	9.7	1	10	1
2	14639	6.7</td													

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS	
2	14736	7.2	0.33	-2.06	1.4	0.068	61.43	522	0.9925	3.28	1.95	10.6	-1	8	1	
2	14741	3.9	0.51	0.26	3.3	-0.192	-218	135	0.9944	2.61	0.1625	14.2	0	8	1	
2	14744	12.7	0.73	-0.18	-49.8	-0.281	5	19	0.9994	2.69	0.06	10.13	1	14	1	
2	14753	17.6	0.26	1.44	1.7	0.059	-189	38	0.9935	3.29	0.33	10.8	0	8	1	
5	14756	16.9	0.26	0.32	51.7	0.031	64	-275	0.9983	2.35	0.84	9.4	0	7	3	
5	14762	6.1	2.77	-0.28	-76.9	0.031	207	134	0.9923	3.25	0.26	7	1	7	3	
5	14765	7.7	0.79	0.32	118.5	0.037	23	-155	1.001	2.41	-1.02	12.6	0	8	4	
6	14783	6.5	0.27	0.28	3.7	0.059	136	484	0.9704	3.23	0.41	16.9	0	7	4	
2	14784	7.3	0.54	-1.51	8.2	-0.42	44	142	0.9927	3.66	-1.27	12.4	-1	8	1	
2	14786	-1.8	2	0.59	2.5	0.046	-175	191	0.9937	2.12	0.33	10.8	0	10	1	
2	14790	11.6	0.23	0.57	32	0.365	-26	8	1.036	3.14	-0.69	9.9	-1	12	1	
4	14793	7.4	0.16	0.27	-110.8	0.05	25	151	0.9984	2.9	-1.06	8.7	-1	8	2	
5	14796	-2.9	-0.79	-0.68	4.8	-0.253	60	166	0.9547	2.66	2	5	1	7	4	
5	14801	7.2	-0.84	0.37	2.5	0.063	11	41	0.9984	3.52	0.85	14	1	8	3	
2	14807	7	0.62	0.48	-17.2	0.529	5	12	0.9446	4.16	0.86	22	-1	8	1	
4	14812	5.8	0.24	0.2	-55.4	0.064	42	266	0.9944	2.04	-1.15	15.6	0	6	2	
5	14815	6.8	-1.02	0.52	-38.1	0.167	28	134	1.054	3.85	0.49	9.9	1	7	3	
5	14831	6.1	0.29	0.17	11.8	0.242	13	76	0.9893	3.21	0.42	12.6	0	7	3	
5	14833	7.7	-1.15	0.94	56.4	0.523	-262	101	1.04	3.43	1.03	9.9	1	7	4	
5	14836	5.4	1.28	2.31	5	-0.527	-16	106	0.9946	3.13	1.75	9	1	6	4	
4	14856	-6.2	-0.01	-0.8	13	0.047	69	160	0.997	3.16	0.5	4.4	0	7	3	
2	14859	6.7	0.21	1.32	22.1	0.05	-76	90.32	1.023	3.61	1.47	10.4	0	7	1	
2	14861	2.9	0.28	1.56	20.4	0.041	-174	262	1.037	2.4	0.45	4.3	1	7	1	
2	14863	11.5	1.54	0.45	40	0.704	31	376	1.024	3.01	0.83	11.8	-1	13	1	
5	14865	6.5	0.08	-0.67	1.9	0.281	190	93	0.991	3.04	0.7	12.6	0	7	3	
4	14880	8.3	0.3	-1.28	-10.8	-0.526	488	577	1.061	3.23	1.24	8.941	0	9	2	
4	14881	-1.8	0.14	0.27	-9.9	0.029	22	104	1.007	3.47	0.44	10	0	6	2	
4	14883	7.8	-0.52	0.34	-24	-0.05	-214	41	1.006	3.79	0.4	8.6	-1	8	2	
4	14884	7.8	1.195	3.38	24.8	0.111	-24	223	0.99	2.71	0.6756	4.7	1	9	3	
4	14894	14.6	0.07	1.17	-21.5	-0.467	-131	524	1.031	3.2	2.17	10.1	0	7	2	
5	14896	7	0.26	-0.36	-2.6	-0.017	37	184	1.044	2.22	1.71	10.3	0	8	3	
4	14899	19.2	-2.59	-0.12	15	0.335	140	187	0.9491	2.93	0.57	9.4	-1	8	2	
4	14900	4.5	-1.43	0.39	48.2	-0.26	236	84	0.994	3.11	0.67	6.8	-1	7	2	
4	14901	8.2	0.14	0.38	-43.3	0.08167	31	103	0.9835	3.01	0.36	12.03	0	6	2	
4	14906	7.1	0.31	0.19	62.5	-0.525	205	890	1.046	3.16	2.03	4.9	0	8	2	
2	14907	17	-0.38	0.53	2.5	-0.168	18	80	0.9976	2.12	-0.79	4.1	0	9	1	
4	14915	6.1	1.62	0.29	6	0.03	29	343	1.082	4.79	0.46	6.8	1	7	3	
2	14919	12.2	0.19	-0.27	5.7	0.07035	27	-286	1.014	3.04	0.54	9.4	-1	7	1	
5	14926	7.1	0.25	0.25	1.6	0.046	50	-224	0.9759	3.31	0.4	10.63	1	8	4	
2	14927	13.3	0.38	0.23	10.8	0.03	-106	96	0.8998	2.93	0.41	13.6	-1	8	1	
4	14933	7.3	0.42	0.53	-83.9	0.047	199.5	475.5	0.9984	2.77	-0.04	8.1	-1	8	2	
4	14937	6.7	1.75	-0.83	5.3	0.036	-134	165	1	2.41	0.79	12.2	-1	7	2	
4	14939	6.4	0.29	0.06	1	0.218	211	101.5	1.023	2.57	1.36	9.5	-1	7	2	
2	14940	11.9	0.4	0.84	8.9	0.033	-97	334	1.048	3.08	0.49	9.321	0	7	1	
4	14943	-4.2	1.07	0.63	-99.4	0.403	34	-74	0.9969	2.19	0.43	9.1	-1	7	2	
4	14953	7.6	1.52	1.21	2.5	-1.034	-210	138	1.003	4.36	-0.43	9.2	0	8	2	
2	14954	6.8	-0.73	0.24	6.6	-0.286	-72	-175	0.9953	3.07	0.48	9.4	-1	7	1	
4	14969	2.2	0.54	1.54	-26.45	0.257	-91	8	0.997	3.4	1.24	9.4	0	8	2	
5	14999	3.7	0.18	0.28	1.3	0.399	9	66.04	0.9909	3	0.53	11.2	2	6	4	
4	15008	6.7	0.79	-1.08	24.7	-0.064	223	96	0.9913	4.37	2.21	12.4	0	7	2	
4	15009	6.7	-1.06	0.34	-56	0.443	14.59	92.54	0.9912	3.44	0.59	6.9	0	7	2	
4	15018	3.9	0.1	0.35	1.6	0.047	43	154	0.9934	3.36	-0.85	11.8	1	8	2	
4	15023	6.4	0.28	0.28	3	0.04	290	-214	0.9922	3.25	1.94	11.27	0	7	2	
2	15025	2.7	0.26	1.58	1.2	0.04	17	195	0.9566	3.21	-1.75	10.8	0	8	1	
4	15034	5.7	0.45	0.26	41.9	0.023	74.28	95	0.9893	1.9	2.26	12.3	0	6	2	
5	15036	4.2	0.43	1.02	8.8	0.169	18	-214	0.9917	3.28	-0.35	12.9	0	7	3	
5	15051	-2.5	0.21	0.28	-16.6	0.028	3	836	0.9917	5.49	0.15	12.15	1	7	3	
4	15052	13.1	0.19	0.35	13.5	0.105	49	118	0.9955	2.64	-0.26	9.445	-1	7	2	
4	15064	13	0.23	0.54	-28.9	0.044	45	169	0.9998	3.5	0.47	8.8	0	9	2	
4	15070	7.6	0.32	1.93	18.35	0.054	44	-658	1.002	3.22	1.98	9	0	8	2	
4	15074	19.6	0.27	2.37	0.32	52.3	0.06629	39	103	1.041	1.17	0.34	6.3	1	8	2
4	15077	6.2	0.2	1.02	-16.2	0.047	42	498	0.9986	3.48	0.59	7.6	1	7	2	
4	15081	-14.1	0.82	0.31	5.9	0.64	-250	-54	1.001	3.2	0.43	11.7	0	6	2	
5	15086	-0.9	0.24	0.25	-4.5	0.042	-238	189	0.992	3.25	0.42	7	1	7	4	
4	15093	-2.7	2.9	-2.82	34.6	0.028	-81	66	0.998	4.21	-0.01	15	-1	9	2	
2	15094	17.2	1.62	2.09	2.1	-0.131	20	-327	0.9782	2.85	0.46	9.5	2	9	1	
2	15103	7.2	-0.325	-1.25	-22.7	0.081	13	153	1.032	4.55	-0.56	9.2	-1	8	1	
4	15104	-0.1	2.37	0.32	52.3	0.06629	39	166	0.9839	4.04	1.36	14.9	-2	7	2	
2	15110	6.5	-0.92	-0.93	-14.6	0.044	25	150	0.9705	4.18	0.44	10.2	0	7	1	
2	15112	7.2	0.16	-0.53	1	-0.419	40	509	0.9896	3.12	0.4	18.5	-2	8	1	
4	15115	6.9	1.09	-0.42	1.6	0.07959	34	-217	1.042	3.16	-1.05	11.4	2	7	2	
2	15131	6.7	0.96	1.46	1.2	-0.434	36	86	0.9448	3.37	1.02	9.7	0	7	1	
5	15139	7.4	0.75	-0.3	63	0.053	19.5	229	0.9912	2.68	-0.06	9.1	-2	8	3	
4	15141	12.5	1.8	1.96	24.6	0.078	15	-159	1.003	3.88	0.86	14.6	0	9	2	
2	15148	0.2	0.32	-1.1	1.2	0.05	221.5	88	0.9884	3.24	0.37	17.3	-1	9	1	
4	15154	11.2	1.26	-0.1	49.5	0.00252	46	189	0.9587	3.12	0.37	9.1	1	7	4	
4	15156	2.5	0.16	0.44	1.2	0.051	39	-117	0.9906	1.97	-0.11	14	-1	7	2	
2	15161	2.6	1.24	2	0.079	32	151	0.998	3.85	0.01	9.5	0	11	1		
4	15167	18.2	1.67	-0.47	16.9	0.056	49	282	1.032	3.37	3.82	9.6	-1	8	2	
5	15178	13.9	0.18	0.36	16.9	0.056	8.015	-145	1	2.97	1.78	10.53	0	8	3	
5	15205	5.7	0.28	0.24	17.5	0.044	281	-248	0.9664	3.31	0.44	11.84	0	6	3	
4	15207															

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	15338	6.7	-0.29	1.62	.55	0.236	170	277	0.9954	2.74	0.7	7.1	2	8	1
4	15240	15.5	0.26	0.58	7.9	0.369	.51	180	1.025	3.31	0.26	9	2	8	2
2	15342	8.3	0.31	1.91	2.4	-0.117	17	43	0.9991	4.24	0.5916	9.7	-1	9	1
4	15344	-2.7	0.21	0.6	-1.8	-0.377	-221	603	0.9962	2.21	-0.9	7	-1	7	2
4	15347	9.9	0.5	-0.91	34.8	0.07	-48	-13	0.9963	3.206	0.63	6.3	0	8	2
5	15349	6.3	0.29	0.56	20.7	-0.341	-234	175.1	0.9936	2.64	0.77	12.3	1	8	3
2	15355	7.5	0.91	0.02	-13.2	0.077	11	35	0.9956	3.36	-1.13	10.8	1	8	1
4	15359	7.3	1.15	0.68	26.7	0.043	90	542	0.9711	3.34	1.4	11.5	0	8	2
2	15366	2.3	2.36	1.28	2.2	-0.461	318	89	1.008	3.26	1.25	9.6	-1	9	1
2	15367	11.1	0.42	0.42	58.8	0.064	-9.97	19	0.9976	3.25	0.57	10.4	-1	12	1
2	15368	9.5	0.67	2.17	-25.5	-0.35	107	-298	0.9968	3.305	-0.03	10.5	-1	7	1
4	15369	6.4	0.89	0.94	51.9	0.04	-129	528	0.9948	3.96	0.7227	10	1	7	2
3	15380	-1.3	0.2	1.24	-14.3	0.05	-177	290	0.9936	3.18	0.55	3.6	0	7	2
4	15381	17.4	0.18	0.49	-11.1	0.047	23	90	0.9919	2.35	1.41	11.6	-1	7	2
5	15387	11.9	0.38	0.49	2.7	0.027	-23	42	1	1.36	1.37	10.3	1	13	3
2	15388	15.1	0.5	1.75	1.3	0.04	87	168	0.992	3.18	0.69	11.16	0	7	1
5	15389	17.8	0.45	0.07	1.9	0.632	10	18	0.9309	3.22	1.36	13	2	11	3
5	15392	6.2	-1.54	0.49	10.6	-0.507	-135	115	0.9527	3.27	0.57	8.3	0	7	3
4	15400	7.9	0.25	0.34	11.4	0.04	-2	219	1.079	3.11	0.57	4.6	-1	8	2
2	15405	6.2	0.32	0.45	12.23	0.259	-285	94	1.035	3.25	0.6	9.7	1	7	1
4	15407	-15.8	1.35	1.04	-53.2	0.043	28	37	0.9968	3.2	0.59	9.4	0	8	2
5	15408	6.5	0.35	-1.09	15.87	0.567	-164	-151	0.9962	2.93	0.51	5.3	2	7	4
2	15411	-15.4	-0.35	2.01	-46.1	0.003	83	432	0.991	3.03	0.41	16.6	0	8	1
5	15413	5.8	0.32	-1.24	1.536	0.504	-76	65	1.05	2.23	0.42	11.8	0	7	3
5	15418	6.5	0.34	0.28	-20.7	0.138	43	188	0.9928	3.13	1.97	11.1	0	7	4
5	15419	7.7	0.56	0.08	0.2	0.631	257	284	1.016	3.24	0.66	14.3	1	8	3
2	15421	6.6	0.28	1.76	12.8	0.044	16	-380	0.9977	2.6	0.47	9.8	0	7	1
2	15425	6.7	0.63	1.34	-4.4	0.033	-145	349	1.012	4.26	0.77	11.7	0	7	1
4	15436	15	0.34	2.11	14.9	0.06	26	146	0.9983	3.13	0.45	9	0	7	2
5	15438	12.5	0.24	-1.6	1.7	-0.39	-144	136	0.9932	4.16	0.51	10.4	0	9	3
5	15440	-1.7	0.66	-0.58	1.4	0.318	245	13	0.994	1.73	0.58	7.8	0	9	3
4	15443	-5.8	1.25	0.01	79	0.037	25	102	0.9894	4.27	-0.21	8	0	6	2
2	15460	11.8	0.39	0.3	2.1	0.102	-238	7	0.9946	4.14	0.58	10.16	0	8	1
2	15464	7.3	-0.94	1.19	1.5	0.553	29	108	0.9934	2.27	1.8	11	-1	8	1
4	15465	7.1	0.53	0.07	7.5	0.071	15	24	0.9951	4.51	0.66	10.8	-1	8	2
5	15473	7.4	0.22	-0.41	8.8	0.027	283	74	0.9685	2.98	1.01	12.4	0	8	3
4	15475	13.9	0.19	0.27	-4.268	0.057	196	155	1.033	2.94	-0.63	8.8	-2	8	2
4	15483	6.9	-0.38	0.54	7.9	0.036	-251	169	0.9927	2.38	0.47	12.2	0	8	2
5	15494	0.7	0.31	-0.93	8	0.174	33	122	1.036	3.13	0.63	10.4	0	7	4
5	15495	7.8	0.91	0.74	40.1	0.808	33	156	0.991	3.07	0.52	12.8	2	9	4
4	15498	-4.7	0.26	-0.41	14.4	0.067	589	370	0.9646	3.07	3.66	4.2	-1	8	3
2	15499	-1.7	0.35	0.31	1.8	0.069	15	351	0.9944	3.18	-0.59	11.9	0	8	1
4	15500	18.5	1.43	-0.19	1.8	-0.501	8	24	0.9978	4.06	0.53	4.7	1	8	2
2	15501	8.1	0.24	0.33	1.486	0.048	-300	-184	0.9972	3.16	-0.18	10.3	-1	9	1
2	15510	8.2	1.72	0.29	-14.8	0.6	-104	742	0.9911	2.14	0.32	14.7	-1	9	1
2	15512	7.6	-1.07	0.37	26.5	0.04	18	56	1.044	2.21	0.48	12.4	-1	8	1
2	15516	18.5	0.23	0.28	42.3	0.039	179	403	0.9865	1.77	1.58	7.5	-1	7	1
5	15518	7	-1.39	-0.73	52.6	0.445	132	102.7	1.028	4.37	-0.75	12.8	1	8	3
4	15519	-1.5	0.43	-1.35	19.3	0.1	20	301	0.996	3.94	-0.8	11.7	0	8	2
4	15524	14.9	1.54	0.49	1.6	0.167	229	94	0.9534	3.11	1.98	11.4	-1	8	2
2	15527	-2.2	0.24	0.57	-4.6	0.044	80	288	0.9974	3.96	-0.28	19.5	0	9	1
5	15529	7.1	-0.45	0.35	16.5	0.506	7	789	0.9511	3.16	0.59	21.7	0	8	3
4	15530	5.5	0.49	0.89	28.3	0.044	28	-257	1.033	4.61	0.82	14	0	6	2
2	15538	19.7	0.4	1.62	2	0.422	91	63	1.03	2.02	1.17	9	0	10	1
2	15539	6	1.78	0.45	76.85	0.048	42	419	0.969	3.76	0.98	10.1	0	7	1
4	15541	19.8	1.36	0.48	-54.1	0.026	23	-491	0.9918	3.15	0.5	7	0	9	2
2	15546	13.6	0.25	0.24	46.1	-0.354	39	582	0.994	3.53	0.06	10.8	-1	7	1
2	15547	-4.2	0.23	0.32	-22	0.024	26	140.5	0.9908	3.29	1.59	11.8	0	7	1
4	15548	6.6	0.19	-1.04	15.4	-0.08	62	153	0.9984	1.97	0.3967	9.3	1	7	2
2	15552	8.8	0.59	0.18	-40.7	0.3	188	74	0.9974	2.35	1.62	8.3	-1	10	1
5	15556	7.3	0.51	0.26	30.6	0.307	-204	135	0.9944	1.31	-0.35	10.1	1	8	3
4	15567	8.1	0.49	0.49	11.8	0.048	46	127.9	1.015	2.62	0.46	9.11	-1	9	2
2	15572	7.4	-1.29	1.81	12.8	0.629	48.5	62	0.9819	4.25	-0.86	14.5	-1	8	1
5	15573	20.9	0.32	0.52	1.8	0.911	-174	-288	0.9846	3.28	-1.1	11.5	1	12	3
4	15574	7	1.19	0.52	1.7	-0.443	-109	-314	1.038	2.19	0.52	9.1	0	8	2
2	15577	0.6	1.67	-0.33	-86.2	0.08	14	138	0.9972	4.29	1.2	6.5	-1	8	1
4	15579	7.4	-0.02	0.37	-3.122	-0.039	-127	113	0.9934	3.94	0.29	6.9	0	8	2
2	15581	11.5	0.21	0.38	-15	-0.327	-2	57	0.9951	3.06	0.36	9.5	-1	7	1
2	15589	-4.6	-1.03	1.48	-58.2	0.123	260	250	1.026	3.07	0.48	10.82	-1	7	1
2	15596	-3.2	-0.39	0.24	2.5	0.226	-96	15	0.9991	3.32	0.35	10.5	0	10	1
5	15598	6.4	0.59	0.85	-39.45	0.314	61	228	1	2.95	0.75	10.6	1	9	3
5	15599	7.1	0.22	0.32	16.9	0.056	-16	158	0.9703	3.37	0.38	9.6	0	8	3
5	15605	10.7	0.35	0.84	64.5	0.034	-93	134	0.9897	3.26	0.38	13.1	2	8	3
5	15606	6.4	-1.44	0.36	-32.9	-0.334	43	342	0.9922	3.42	1.46	11	0	7	3
4	15608	6.3	0.01	-1.68	-63.3	-0.821	223	100	0.991	3.42	0.57	11.4	0	7	2
4	15616	7.9	2.46	0.05	0.8	0.038	11	30	0.9924	2.37	0.35	5.5	1	6	2
2	15618	7.2	0.66	1.33	2.5	0.586	124	-269	0.9941	2.35	-0.53	12.8	0	8	1
2	15621	9.3	-0.06	0.42	2	0.08	11	27	0.9974	2.01	1.04	9.4	0	9	1
2	15626	7.7	0.69	0.49	0.5	0.115	-255	450	0.9851	3.54	1.56	15.9	0	9	1
2	15638	7.2	-0.98	-1.82	7	-0.188	19	-233	0.9608	4.38	0.49	12.8	0	8	1
2	15639	7	0.69	-1.18	34.7	0.317	49.05	221	0.9954	2.89	0.84	5.7	-2	7	1
2</td															

TARGET	IN	FixedAcidity	VolatileAcidity	CitricAcid	ResidualSugar	Chlorides	FreeSulfurDioxide	TotalSulfurDioxide	Density	pH	Sulphates	Alcohol	LabelAppeal	AcidIndex	STARS
2	15781	-2.1	-0.82	0.24	-15.7	-0.331	86	122.1	0.9435	2.76	0.31	11.02	1	8	1
2	15782	7.6	-0.13	1.77	2.2	0.494	7	330	0.9299	2.55	0.55	9.7	0	8	1
6	15784	-4.1	-2.21	1.46	24.3	0.03	258	158	0.9893	3.19	0.96	16.8	2	7	4
2	15791	8.6	2.89	0.49	-22	0.043	43.62	-369	0.9572	2.98	0.59	10.5	1	9	1
4	15796	7.2	-0.11	-0.26	16.6	0.421	344	24	1.041	2.19	1.15	9.3	1	7	2
5	15798	-4.2	0.4	0.19	-56.2	0.034	-197	124	0.9549	3.22	3.35	10.1	1	7	3
2	15806	-8.3	1.64	0.25	85.9	-0.115	-170	-113	0.9442	4.21	1.86	6.4	-1	7	1
2	15814	10.9	0.735	0.16	46.1	0.1	15	45	0.9966	4.41	2.11	9.3	0	8	1
2	15819	7.2	0.64	0.09	-33.7	0.108	-247	151	0.9818	3.07	0.42	9.2	1	8	1
4	15825	11.8	-1.26	1.6	6.3	1.205	238	573	1.001	4.46	-0.18	7.3	0	8	2
4	15826	6.8	-0.31	1.55	-6.45	0.092	-147	-272	0.999	2.98	0.56	5.8	1	7	2
5	15831	20.2	0.15	1.39	-20.1	0.1293	17	70.07	1.01	3.03	0.4	10.3	0	9	3
5	15835	1.4	0.98	-0.05	-44.9	0.412	176	417	0.9949	4.6	0.46	11.7	1	7	4
2	15836	6	0.31	0.12	3.6	0.067	-37	425	1.021	3.39	-0.76	11	-1	7	1
5	15839	-0.4	0.19	-0.49	38.7	0.032	14	75	1.029	2.49	0.38	13	0	7	4
2	15845	6.4	-0.95	1.06	-19.7	-0.553	-262	394	0.9503	3.49	0.63	9.6	0	7	1
4	15858	6.5	1.39	1.67	-70.9	0.05	41	178	1.035	3.37	2.18	9.7	0	8	2
4	15859	6	0.14	0.21	0.577	0.045	42	168	1.029	3.25	0.43	5.9	0	7	2
4	15876	12.1	0.75	-2.96	1.1	-0.342	-174	192	0.9841	3.32	0.5	10.2	1	7	2
5	15878	6.6	0.18	-0.97	1.7	0.175	47.43	585	0.9921	2.24	0.6081	10.2	0	7	3
5	15880	-2.4	0.18	0.34	2.7	-0.054	15	188	0.9947	2.41	0.78	11.8	1	8	3
5	15886	15.9	-1.54	-0.7	68	0.332	108	168	0.9928	3.07	0.6489	11.4	0	7	3
2	15888	7.2	0.62	1.53	-82.3	0.17	23.43	148	0.9986	3.17	0.93	9.2	1	10	1
2	15891	6.2	0.15	0.46	1.6	0.039	190	-184	0.993	3.38	-0.86	4.7	1	7	1
2	15900	13.2	-0.18	1	19.5	0.04	33	148	1.038	3.12	0.2431	18.3	-2	9	1
5	15902	-2.4	0.21	0.28	1.2	-0.007	-250	234	0.9927	3.19	2.07	9.8	0	8	3
2	15904	7.5	0.19	0.62	9.9	-0.11	25	115	1.04	3.15	0.46	10.9	0	8	1
2	15908	7.1	1.35	0.38	1.8	0.598	263	18	0.9925	3.152	2.32	12.8	-1	8	1
2	15910	12.7	0.46	1.67	35.8	-0.253	6	-723	0.996	3.28	-1.58	10.18	-1	8	1
2	15917	4.4	-2.83	0.37	63.5	-0.789	-52	0	0.9884	3.19	0.51	12.4	1	7	1
4	15919	2.7	0.16	3.19	15.5	-0.245	-144	135	0.9984	2.56	0.43	5.7	1	8	3
2	15924	15.4	0.18	0.26	80.5	-0.201	194	-134	0.9772	4.05	0.43	9.4	0	7	1
2	15927	7.4	0.9	-0.1	1.3	-0.374	18	-150	0.9904	2.32	0.56	8.15	0	7	1
2	15937	4.8	0.01	1.83	14	0.169	8	113	0.978	3.44	0.2886	9.8	0	7	1
4	15946	1.3	0.865	0.19	7.1	0.048	193	110	0.9548	3.03	0.41	9.5	-1	6	2
4	15949	7	1.27	3.7	5.9	-0.522	128	118	0.9648	3.36	0.36	9.4	-1	8	2
4	15957	17.1	0.21	0.34	-72.5	0.03	-151	91	0.9627	3.32	0.45	22.5	1	7	2
5	15961	2.2	0.32	0.48	-19.5	-0.064	268	114	0.9911	3.24	-1.73	18.5	0	9	3
2	15964	6.2	-0.55	1.03	11	0.306	533	-83	0.996	3.216	0.38	4.4	-1	7	1
4	15965	-5.9	0.26	-0.33	5.15	0.034	262	365	1.031	3.82	0.51	20.6	-1	6	2
4	15966	18.2	0.46	0.54	-102	0.633	44	-4	0.9579	1.86	0.84	8.8	1	8	2
2	15978	7.6	0.27	-0.23	48.8	0.386	233	282	0.9942	3.08	1.43	3.5	0	8	1
5	15983	6.6	1.32	0	1.8	0.188	5	16	0.9936	2.57	0.44	13.2	1	8	3
5	15987	7.1	0.6	-0.58	1.9	-0.063	62	-244	0.9989	2.22	0.4314	10.4	-2	10	3
2	15988	5.7	0.25	-2.33	12.5	0.489	-83.5	417	1.003	2.56	0.45	14.3	-1	6	1
2	15998	-2.1	-1.67	0.3	-16.2	0.52	231	161	0.9955	2.83	0.59	10.2	-1	7	1
2	16004	7.3	0.32	0.25	7.2	-0.303	47	180	0.9961	4.26	-0.81	12.3	1	8	1
4	16008	28.4	0.28	0.34	8.9	0.357	95	111	0.9727	3.25	0.47	4.7	-1	7	3
2	16011	-1.3	0.49	0.38	10.5	-0.225	-22	139	1.036	3.75	0.5413	10.3	1	8	1
2	16023	6.7	0.38	0.19	1.55	0.036	274	91	1.051	2.98	1.7	7.4	0	7	1
2	16024	15.6	0.67	0.07	1.2	0.075	78.86	108	0.9931	3.2	0.35	14.4	-1	7	1
2	16025	4.8	0.13	2.15	1.5	0.612	30	133	0.9909	3.59	0.48	11.7	0	8	1
4	16048	13.7	0.24	0.01	-26.55	-0.08	13.07	466	0.9903	3.25	0.4266	10.7	2	7	2
2	16050	5.6	1.86	2.54	-24.7	0.041	322	23	0.9685	3.196	0.99	25.5	1	8	1
4	16051	-3.7	0.36	0.62	7.1	0.208	-48	613	0.9947	3.131	-1.58	9.1	0	8	2
4	16057	6.8	1.68	0.18	-45.3	0.044	56	81	0.9958	3.55	0.48	9.3	1	7	2
5	16059	16.3	1.62	0.48	0.6	0.623	281	506	0.9515	3.04	0.47	19.1	1	8	3
4	16060	-3.8	0.2	0.35	-47	0.779	-196	-235	0.9924	2.79	-0.42	4.5	0	8	2
5	16075	6.4	-0.05	0.21	53	0.041	101	146	1.06	2.42	0.87	9.8	0	6	3
5	16094	6.9	-0.99	-1.24	-25.6	0.11	-178	-546	0.991	3.21	0.36	11.5	2	8	3
5	16096	2.8	0.3	-0.74	15.15	0.631	243	135	0.9841	3.16	3.8	9	1	8	3
2	16116	-3.9	0.79	1.23	-24.1	0.061	11	86.26	0.9959	3.53	0.93	10.4	-1	7	1
2	16118	31	-1.76	0.24	14.2	0.053	198	135	0.9982	3.8	0.42	9.6	0	7	1
4	16121	9	0.725	0.44	47.4	-0.334	-213	526	0.9939	3.24	-1.18	10.6	-2	7	2
4	16122	7.8	1.18	0.24	4.957	0.034	29	-120	0.9903	3.1	0.4	6.1	0	7	2
6	16124	-0.4	-0.98	0.34	1.3	0.226	136	0	0.9918	3.07	-1.22	14.7	1	9	4
4	16125	6.6	0.41	0.22	1.919	0.035	23	117	1.01	2.84	0.39	8.44	0	7	2
2	16126	6.1	-0.22	1.15	1.1	0.041	32	92	1.015	3.26	0.4298	17.2	0	7	1
5	16130	7.1	0.21	0.31	14.6	0.021	281	142	0.9921	3.17	-0.37	9.7	0	8	3

7 Appendix A

7.1 Session Info

- R version 3.3.2 (2016-10-31), x86_64-w64-mingw32
- Locale: LC_COLLATE=English_United States.1252, LC_CTYPE=English_United States.1252, LC_MONETARY=English_United States.1252, LC_NUMERIC=C, LC_TIME=English_United States.1252
- Base packages: base, datasets, graphics, grDevices, methods, parallel, stats, utils
- Other packages: abc 2.1, abc.data 1.0, AER 1.2-4, bibtex 0.4.0, boot 1.3-18, car 2.1-4, corrplot 0.77, DAAG 1.22, data.table 1.10.0, doParallel 1.0.10, dplyr 0.5.0, e1071 1.6-7, foreach 1.4.3, forecast 7.3, Formula 1.2-1, ggplot2 2.2.0, glmulti 1.0.7, highlight 0.4.7, Hmisc 4.0-0, iterators 1.0.8, iterators 0.1-3, knitr 1.15.1, lars 1.2, lattice 0.20-34, leaps 2.9, lmtest 0.9-34, locfit 1.5-9.1, magrittr 1.5, MASS 7.3-45, matrixStats 0.51.0, missForest 1.4, nnet 7.3-12, pacman 0.4.1, pander 0.6.0, pracma 1.9.5, purrr 0.2.2, quantreg 5.29, randomForest 4.6-12, readr 1.0.0, rJava 0.9-8, sandwich 2.3-4, scales 0.4.1, SparseM 1.74, stargazer 5.2, stringr 1.1.0, survival 2.40-1, tibble 1.2, tidyverse 1.0.0, timeDate 3012.100, xlsx 0.5.7, xlsxjars 0.6.1, xtable 1.8-2, zoo 1.7-13
- Loaded via a namespace (and not attached): acepack 1.4.1, assertthat 0.1, backports 1.0.4, bitops 1.0-6, class 7.3-14, cluster 2.0.5, codetools 0.2-15, colorspace 1.3-1, DBI 0.5-1, digest 0.6.10, evaluate 0.10, foreign 0.8-67, fracdiff 1.4-2, grid 3.3.2, gridExtra 2.2.1, gtable 0.2.0, htmlTable 1.7, htmltools 0.3.5, httr 1.2.1, latticeExtra 0.6-28, lazyeval 0.2.0, lme4 1.1-12, lubridate 1.6.0, Matrix 1.2-7.1, MatrixModels 0.4-1, mgcv 1.8-16, minqa 1.2.4, munsell 0.4.3, nlme 3.1-128, nloptr 1.0.4, pbkrtest 0.4-6, plyr 1.8.4, quadprog 1.5-5, R6 2.2.0, RColorBrewer 1.1-2, Rcpp 0.12.8, RCurl 1.95-4.8, RefManager 0.13.1, RJSONIO 1.3-0, rmarkdown 1.2, rpart 4.1-10, rprojroot 1.1, splines 3.3.2, stringi 1.1.2, tools 3.3.2, tseries 0.10-35, XML 3.98-1.5, yaml 2.1.14

7.2 Data Dictionary

Variable Code	Definition
INDEX	Identification Variable (do not use)
TARGET	Number of Cases Purchased
AcidIndex	Proprietary method of testing total acidity of wine by using a weighted average
Alcohol	Alcohol Content
Chlorides	Chloride content of wine
CitricAcid	Citric Acid Content
Density	Density of Wine
FixedAcidity	Fixed Acidity of Wine
FreeSulfurDioxide	Sulfur Dioxide content of wine
LabelAppeal	Marketing Score indicating the appeal of label design for consumers. High numbers suggest customers like the label design. Negative numbers suggest customers don't like the design.
ResidualSugar	Residual Sugar of wine
STARS	Wine rating by a team of experts. 4 Stars = Excellent, 1 Star = Poor
Sulphates	Sulfate content of wine
TotalSulfurDioxide	Total Sulfur Dioxide of Wine
VolatileAcidity	Volatile Acid content of wine
pH	pH of wine

7.3 R source code

Please see Homework 5.rmd on GitHub for source code.

<https://github.com/ChristopheHunt/DATA-621-Group-1/blob/master/Homework%205/Homework%205.Rmd>