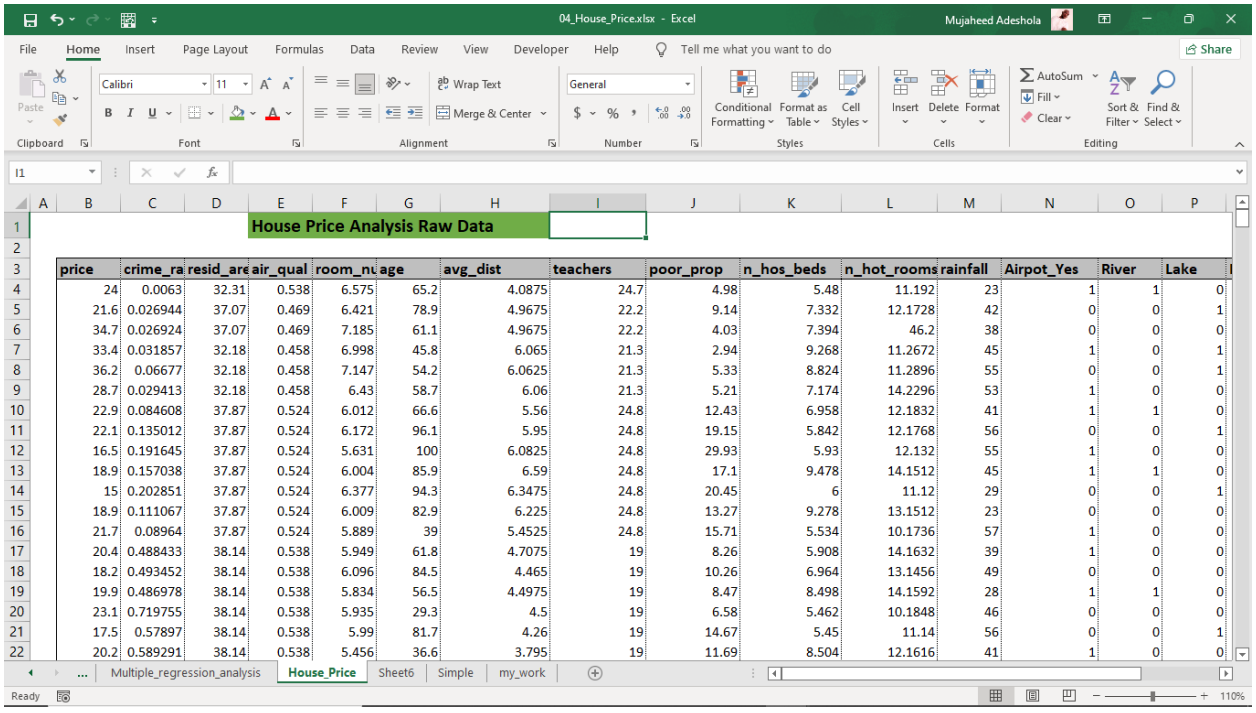
FORECASTING MODEL ANALYSIS

Business Problem

The real estate firm is facing difficulty in determining and predicting the price of houses in their listenings, the organization what to have more insight about the effect of price change on revenue. Compare different independent/predictor variables with the dependent/response variable (price) and find the relationship between these variables to effectively predict the price of houses.

The dataset contains 16 columns and 506 rows of historical data of the real estate company. Descriptive, correlation, simple regression, and multiple regression analyses were performed to determine the forecast model analysis of the dependent variable.



House Price Analysis Raw Data

price	crime_ra	resid_are	air_qual	room_nu	age	avg_dist	teachers	poor_prop	n_hos_beds	n_hot_rooms	rainfall	Airpot_Yes	River	Lake
24	0.0063	32.31	0.538	6.575	65.2	4.0875	24.7	4.98	5.48	11.192	23	1	1	0
21.6	0.026944	37.07	0.469	6.421	78.9	4.9675	22.2	9.14	7.332	12.1728	42	0	0	1
34.7	0.026924	37.07	0.469	7.185	61.1	4.9675	22.2	4.03	7.394	46.2	38	0	0	0
33.4	0.031857	32.18	0.458	6.998	45.8	6.065	21.3	2.94	9.268	11.2672	45	1	0	1
36.2	0.06677	32.18	0.458	7.147	54.2	6.0625	21.3	5.33	8.824	11.2896	55	0	0	1
28.7	0.029413	32.18	0.458	6.43	58.7	6.06	21.3	5.21	7.174	14.2296	53	1	0	0
22.9	0.084608	37.87	0.524	6.012	66.6	5.56	24.8	12.43	6.958	12.1832	41	1	1	0
22.1	0.135012	37.87	0.524	6.172	96.1	5.95	24.8	19.15	5.842	12.1768	56	0	0	1
16.5	0.191645	37.87	0.524	5.631	100	6.0825	24.8	29.93	5.93	12.132	55	1	0	0
18.9	0.157038	37.87	0.524	6.004	85.9	6.59	24.8	17.1	9.478	14.1512	45	1	1	0
15	0.202851	37.87	0.524	6.377	94.3	6.3475	24.8	20.45	6	11.12	29	0	0	1
18.9	0.111067	37.87	0.524	6.009	82.9	6.225	24.8	13.27	9.278	13.1512	23	0	0	0
21.7	0.08964	37.87	0.524	5.889	39	5.4525	24.8	15.71	5.534	10.1736	57	1	0	0
20.4	0.488433	38.14	0.538	5.949	61.8	4.7075	19	8.26	5.908	14.1632	39	1	0	0
18.2	0.493452	38.14	0.538	6.096	84.5	4.465	19	10.26	6.964	13.1456	49	0	0	0
19.9	0.486978	38.14	0.538	5.834	56.5	4.4975	19	8.47	8.498	14.1592	28	1	1	0
23.1	0.719755	38.14	0.538	5.935	29.3	4.5	19	6.58	5.462	10.1848	46	0	0	0
17.5	0.57897	38.14	0.538	5.99	81.7	4.26	19	14.67	5.45	11.14	56	0	0	1
20.2	0.589291	38.14	0.538	5.456	36.6	3.795	19	11.69	8.504	12.1616	41	1	0	0

Descriptive_analysis

price		*crime_rate*		*resid_area*		*air_qual*	
Mean	22.52885375	Mean	0.813418	Mean	41.13678	Mean	
Standard Error	0.408197508	Standard Error	0.045466	Standard E	0.30498	Standard E	
Median	21.2	Median	0.228336	Median	39.69	Median	
Mode	50	Mode	0.014898	Mode	48.1	Mode	
Standard Deviation	9.182175882	Standard Deviatic	1.022731	Standard D	6.860353	Standard D	
Sample Variance	84.31235393	Sample Variance	1.045979	Sample Var	47.06444	Sample Var	
Kurtosis	1.516783448	Kurtosis	0.504554	Kurtosis	-1.23354	Kurtosis	
Skewness	1.11091185	Skewness	1.269201	Skewness	0.295022	Skewness	
Range	45	Range	4.493245	Range	27.28	Range	
Minimum	5	Minimum	0.0063	Minimum	30.46	Minimum	
Maximum	50	Maximum	4.499545	Maximum	57.74	Maximum	
Sum	11399.6	Sum	411.5896	Sum	20815.21	Sum	
Count	506	Count	506	Count	506	Count	
Largest(25)	43.8	Largest(25)	2.825798	Largest(25)	51.89	Largest(25)	
Smallest(25)	10.2	Smallest(25)	0.026944	Smallest(2	32.18	Smallest(2	

room_num		*age*		*dist1*		*dist2*		
0.554695	Mean	6.284634	Mean	68.5749	Mean	3.971996	Mean	3.628775
0.005151	Standard E	0.031235	Standard E	1.25137	Standard E	0.093736	Standard E	0.093738
0.538	Median	6.2085	Median	77.5	Median	3.385	Median	3.01
0.538	Mode	5.713	Mode	100	Mode	1.96	Mode	1.54
0.115878	Standard D	0.702617	Standard D	28.14886	Standard D	2.108532	Standard D	2.10858
0.013428	Sample Var	0.493671	Sample Var	792.3584	Sample Var	4.445908	Sample Var	4.446111
-0.06467	Kurtosis	1.8915	Kurtosis	-0.96772	Kurtosis	0.497728	Kurtosis	0.472927
0.729308	Skewness	0.403612	Skewness	-0.59896	Skewness	1.010577	Skewness	1.007492
0.486	Range	5.219	Range	97.1	Range	11.19	Range	11.01
0.385	Minimum	3.561	Minimum	2.9	Minimum	1.13	Minimum	0.92
0.871	Maximum	8.78	Maximum	100	Maximum	12.32	Maximum	11.93
280.6757	Sum	3180.025	Sum	34698.9	Sum	2009.83	Sum	1836.16
506	Count	506	Count	506	Count	506	Count	506
0.74	Largest(25)	7.645	Largest(25)	100	Largest(25)	8.09	Largest(25)	7.77
0.409	Smallest(25	5.304	Smallest(25	17.5	Smallest(25	1.63	Smallest(25	1.28

dist3		*dist4*		*teachers*		*poor_prop*		*n_hos_beds*	
Mean	3.960672	Mean	3.618972	Mean	21.54447	Mean	12.65306	Mean	
Standard E	0.094236	Standard E	0.093321	Standard E	0.096244	Standard E	0.317459	Standard E	
Median	3.375	Median	3.07	Median	20.95	Median	11.36	Median	
Mode	2.37	Mode	1.81	Mode	19.8	Mode	8.05	Mode	
Standard D	2.119797	Standard D	2.099203	Standard D	2.164946	Standard D	7.141062	Standard D	
Sample Var	4.493541	Sample Var	4.406653	Sample Var	4.686989	Sample Var	50.99476	Sample Var	
Kurtosis	0.458464	Kurtosis	0.503435	Kurtosis	-0.28509	Kurtosis	0.49324	Kurtosis	
Skewness	1.003848	Skewness	1.00468	Skewness	0.802325	Skewness	0.90646	Skewness	
Range	11.17	Range	11.21	Range	9.4	Range	36.24	Range	
Minimum	1.15	Minimum	0.73	Minimum	18	Minimum	1.73	Minimum	
Maximum	12.32	Maximum	11.94	Maximum	27.4	Maximum	37.97	Maximum	
Sum	2004.1	Sum	1831.2	Sum	10901.5	Sum	6402.45	Sum	
Count	506	Count	506	Count	506	Count	506	Count	
Largest(25)	8.11	Largest(25)	7.65	Largest(25)	25.3	Largest(25)	27.26	Largest(25)	
Smallest(25	1.62	Smallest(25	1.27	Smallest(25	19	Smallest(25	3.59	Smallest(25	

n_hot_rooms		*rainfall*		*parks*		
7.899767	Mean	13.0416	Mean	39.18775	Mean	0.054454
0.066172	Standard E	0.2329	Standard E	0.555569	Standard E	0.000473
7.999	Median	12.72	Median	39	Median	0.053507
9.478	Mode	13.4	Mode	57	Mode	#N/A
1.476683	Standard D	5.238957	Standard D	12.49722	Standard D	0.010632
2.180591	Sample Var	27.44667	Sample Var	156.1805	Sample Var	0.000113
-1.13784	Kurtosis	214.2323	Kurtosis	-1.2313	Kurtosis	-0.12202
-0.00918	Skewness	13.79055	Skewness	0.022627	Skewness	0.533991
5.608	Range	91.0624	Range	54	Range	0.05342
5.268	Minimum	10.0576	Minimum	6	Minimum	0.033292
10.876	Maximum	101.12	Maximum	60	Maximum	0.086711
3934.084	Sum	6599.052	Sum	19829	Sum	27.5537
498	Count	506	Count	506	Count	506
10.192	Largest(25)	15.1968	Largest(25)	58	Largest(25)	0.075319
5.578	Smallest(25	10.1544	Smallest(25	21	Smallest(25	0.038894

	price	*crime_rate*	*resid_area*	*air_qual*	*room_num*	*age*	*avg_dist*	*teachers*
price	1							
crime_rate	-0.46653	1			**Correlation_analysis**			
resid_area	-0.48475	0.660283	1					
air_qual	-0.4293	0.707587	0.763651	1				
room_num	0.696304	-0.28878	-0.39168	-0.30219	1			
age	-0.378	0.559591	0.644779	0.73147	-0.24026	1		
avg_dist	0.249289	-0.58637	-0.70802	-0.76925	0.205241	-0.74791	1	
teachers	0.505655	-0.39005	-0.38325	-0.18893	0.355501	-0.26152	0.232452	1
poor_prop	-0.74084	0.60897	0.6038	0.590879	-0.61381	0.602339	-0.49697	-0.37404
n_hos_bed	0.10888	-0.00409	0.005799	-0.04955	0.032009	-0.02101	-0.02787	-0.00806
n_hot_roo	0.017007	0.056569	-0.00376	0.007238	0.014583	0.013918	-0.0207	-0.03701
rainfall	-0.0472	0.082151	0.055845	0.091956	-0.06472	0.074684	-0.03728	-0.04593
parks	-0.39157	0.638951	0.707635	0.915544	-0.28282	0.67385	-0.70792	-0.187
Airpot_Yes	0.182867	-0.13449	-0.1154	-0.0739	0.163774	0.005101	0.021402	0.069437
River	0.071751	-0.0601	-0.09898	-0.03777	0.046251	-0.08861	0.032247	0.094256
Lake	0.036233	-0.02539	-0.02659	-0.04639	-0.0042	0.003452	0.03489	0.048717
Lake And R	-0.0375	0.009076	0.051649	0.013849	0.010554	-0.00435	-0.02132	-0.04698

poor_prop	*n_hos_beds_hot_room*	*rainfall*	*parks*	*Airpot_Yes*	*River*	*Lake*	*ıke And Rive*
1							
-0.06601	1						
0.017035	-0.00313	1					
0.061444	0.058596	0.014868	1				
0.55231	-0.07127	0.023756	0.078278	1			
-0.09505	-0.00637	-0.05534	-0.01317	-0.0525	1		
-0.109	-0.07415	-0.0641	-0.03702	-0.04886	0.017341	1	
0.003197	0.042278	0.037925	-0.01617	-0.03499	0.035491	-0.36656	1
0.02062	0.059482	0.014754	0.109234	0.013265	-0.07034	-0.30409	-0.19675

er

SUMMARY OUTPUT

Simple Regression Analysis

Regression Statistics	
Multiple R	0.696304
R Square	0.484839
Adjusted R	0.483817
Standard E	6.597016
Observatio	506

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	1	20643.35	20643.35	474.3349	1.31E-74
Residual	504	21934.39	43.52062		
Total	505	42577.74			

	Coefficients	*andard Erro*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*Jpper 95.0%*
Intercept	-34.6592	2.642136	-13.1179	4.99E-34	-39.8502	-29.4683	-39.8502	-29.4683
room_num	9.09967	0.417814	21.77923	1.31E-74	8.278798	9.920542	8.278798	9.920542

;

SUMMARY OUTPUT

Multiple_regression_analysis

Regression Statistics	
Multiple R	0.849011
R Square	0.720819
Adjusted R Square	0.712273
Standard Error	4.92534
Observations	506

ANOVA

	df	*SS*	*MS*	*F*	*ignificance F*
Regression	15	30690.84	2046.056	84.34225	4.2E-125
Residual	490	11886.9	24.25897		
Total	505	42577.74			

	Coefficients	*tandard Erro*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*
Intercept	-6.49856	5.264068	-1.23451	0.217603	-16.8415	3.844367	-16.8415
crime_rate	0.009711	0.348185	0.02789	0.977761	-0.67441	0.69383	-0.67441
resid_area	-0.04087	0.057585	-0.70982	0.478155	-0.15402	0.072269	-0.15402
air_qual	-15.8974	4.003793	-3.97058	8.24E-05	-23.7641	-8.03068	-23.7641
room_num	4.019016	0.426606	9.420907	1.76E-19	3.180813	4.857219	3.180813
age	-0.00571	0.013606	-0.42001	0.674665	-0.03245	0.021019	-0.03245
avg_dist	-1.21864	0.188933	-6.45013	2.68E-10	-1.58986	-0.84742	-1.58986
teachers	1.007001	0.122098	8.247446	1.5E-15	0.767099	1.246902	0.767099
poor_prop	-0.57727	0.052695	-10.955	3.95E-25	-0.68081	-0.47374	-0.68081
n_hos_beds	0.329221	0.152239	2.162532	0.03106	0.0301	0.628342	0.0301
n_hot_rooms	0.091864	0.082172	1.117949	0.264137	-0.06959	0.253316	-0.06959
rainfall	0.016119	0.017839	0.90358	0.366662	-0.01893	0.051168	-0.01893
Airpot_Yes	1.131516	0.454266	2.490866	0.013073	0.238966	2.024066	0.238966
River	-0.29132	0.546656	-0.53291	0.594337	-1.3654	0.78276	-1.3654
Lake	0.264086	0.641963	0.411373	0.680979	-0.99725	1.525426	-0.99725
Lake And River	-0.68756	0.714023	-0.96293	0.336057	-2.09048	0.715369	-2.09048

Prediction of 19 unit of price

Jpper 95.0%		
3.844367		-6.49856
0.69383	0.04632	0.00045
0.072269	41.93	-1.71388
-8.03068	0.573	-9.10921
4.857219	6.03	24.23467
0.021019	80.8	-0.46175
-0.84742	2.505	-3.05269
1.246902	19	19.13301
-0.47374	7.88	-4.5489
0.628342	10.28	3.384393
0.253316	10.152	0.932599
0.051168	45	0.725336
2.024066	1	1.131516
0.78276	0	0
1.525426	0	0
0.715369	0	0
		24.15698

So, the model is predicting 24.156 unite for the value of house.

Price Forecast Model using Excel solver tool

	Beta0	Beta1	Beta2	Beeta3	Beta4	Beta5	Beta6
Coef	-6.49136	0.009597	-0.04092	-15.896	4.018519	-0.00572	-1.21875
	price	**crime_rat**	**resid_area**	**air_qual**	**room_nur**	**age**	**avg_dist**
	24	0.0063	32.31	0.538	6.575	65.2	4.0875
	21.6	0.026944	37.07	0.469	6.421	78.9	4.9675
	34.7	0.026924	37.07	0.469	7.185	61.1	4.9675
	33.4	0.031857	32.18	0.458	6.998	45.8	6.065
	36.2	0.06677	32.18	0.458	7.147	54.2	6.0625
	28.7	0.029413	32.18	0.458	6.43	58.7	6.06
	22.9	0.084608	37.87	0.524	6.012	66.6	5.56
	22.1	0.135012	37.87	0.524	6.172	96.1	5.95
	16.5	0.191645	37.87	0.524	5.631	100	6.0825
	18.9	0.157038	37.87	0.524	6.004	85.9	6.59
	15	0.202851	37.87	0.524	6.377	94.3	6.3475
	18.9	0.111067	37.87	0.524	6.009	82.9	6.225
	21.7	0.08964	37.87	0.524	5.889	39	5.4525
	20.4	0.488433	38.14	0.538	5.949	61.8	4.7075
	18.2	0.493452	38.14	0.538	6.096	84.5	4.465
	19.9	0.486978	38.14	0.538	5.834	56.5	4.4975
	23.1	0.719755	38.14	0.538	5.935	29.3	4.5
	17.5	0.57897	38.14	0.538	5.99	81.7	4.26
	20.2	0.589291	38.14	0.538	5.456	36.6	3.795
	18.2	0.545691	38.14	0.538	5.727	69.5	3.8
	13.6	0.811725	38.14	0.538	5.57	98.1	3.7975
	19.6	0.616288	38.14	0.538	5.965	89.2	4.0125
	15.2	0.803109	38.14	0.538	6.142	91.7	3.98
	14.5	0.687345	38.14	0.538	5.813	100	4.095
	15.6	0.559764	38.14	0.538	5.924	94.1	4.4
	13.9	0.610059	38.14	0.538	5.599	85.7	4.455
	16.6	0.513967	38.14	0.538	5.813	90.3	4.6825
	14.8	0.670784	38.14	0.538	6.047	88.8	4.4525
	18.4	0.572667	38.14	0.538	6.495	94.4	4.455
	21	0.694371	38.14	0.538	6.674	87.3	4.24
	12.7	0.756502	38.14	0.538	5.713	94.1	4.2325
	14.5	0.856422	38.14	0.538	6.072	100	4.175
	13.2	0.870452	38.14	0.538	5.95	82	3.9925
	13.1	0.766268	38.14	0.538	5.701	95	3.7875
	13.5	0.96043	38.14	0.538	6.096	96.9	3.76
	18.9	0.062195	35.96	0.499	5.933	68.2	3.36
	20	0.09298	35.96	0.499	5.841	61.4	3.3775
	21	0.077091	35.96	0.499	5.85	41.5	3.935
	24.2	0.161311	35.96	0.499	5.966	30.2	3.8475
	30.8	0.027255	32.95	0.428	6.595	21.8	5.4
	34.9	0.033038	32.95	0.428	7.024	15.8	5.4025
	26.6	0.11995	36.91	0.448	6.77	2.9	5.7225
	25.3	0.132343	36.91	0.448	6.169	6.6	5.7225
	24.7	0.147868	36.91	0.448	6.211	6.5	5.72

21.2	0.115728	36.91	0.448	6.069	40	5.7225
19.3	0.158217	36.91	0.448	5.682	33.8	5.1025
20	0.172574	36.91	0.448	5.786	33.3	5.1
16.6	0.20642	36.91	0.448	6.03	85.5	5.69
14.4	0.226235	36.91	0.448	5.399	95.3	5.87
19.4	0.198662	36.91	0.448	5.602	62	6.0875
19.7	0.085012	35.64	0.439	5.963	45.7	6.815
20.5	0.042456	35.64	0.439	6.115	63	6.8175
25	0.052213	35.64	0.439	6.511	21.1	6.8175
23.4	0.048609	35.64	0.439	5.998	21.4	6.815
18.9	0.013508	34	0.41	5.888	47.6	7.3175
35.4	0.013025	31.22	0.403	7.249	21.9	8.6975
24.7	0.020342	30.74	0.41	6.383	35.7	9.1875
31.6	0.014218	31.32	0.411	6.816	40.5	8.325
23.3	0.143624	35.13	0.453	6.145	29.2	7.815
19.6	0.098288	35.13	0.453	5.927	47.2	6.93
18.7	0.13917	35.13	0.453	5.741	66.2	7.225
16	0.158464	35.13	0.453	5.966	93.4	6.82
22.2	0.104603	35.13	0.453	6.456	67.8	7.225
25	0.119115	35.13	0.453	6.762	43.4	7.9825
33	0.019322	31.38	0.4161	7.104	59.5	9.2225
23.5	0.035213	33.37	0.398	6.29	17.8	6.6125
19.4	0.042858	33.37	0.398	5.787	31.1	6.61
22	0.056276	36.07	0.409	5.878	21.4	6.4975
17.4	0.127108	36.07	0.409	5.594	36.8	6.4975
20.9	0.120588	36.07	0.409	5.885	33	6.5
24.2	0.08458	40.81	0.413	6.417	6.6	5.285
21.7	0.14735	40.81	0.413	5.961	17.5	5.2875
22.8	0.087681	40.81	0.413	6.065	7.8	5.2875
23.4	0.178472	40.81	0.413	6.245	6.2	5.2875
24.1	0.075998	42.83	0.437	6.273	6	4.2525
21.4	0.090864	42.83	0.437	6.286	45	4.505
20	0.0967	42.83	0.437	6.279	74.5	4.0525
20.8	0.083486	42.83	0.437	6.14	45.8	4.09
21.2	0.054924	42.83	0.437	6.232	53.7	5.015
20.3	0.080538	42.83	0.437	5.874	36.6	4.5025
28	0.040307	34.86	0.426	6.727	33.5	5.4
23.9	0.043653	34.86	0.426	6.619	70.4	5.4025
24.8	0.035936	34.86	0.426	6.302	32.2	5.4025
22.9	0.034894	34.86	0.426	6.167	46.7	5.4
23.9	0.049352	34.49	0.449	6.389	48	4.78
26.6	0.055766	34.49	0.449	6.63	56.1	4.44
22.5	0.050579	34.49	0.449	6.015	45.1	4.4275
22.2	0.069069	34.49	0.449	6.121	56.8	3.7475
23.6	0.055056	33.41	0.489	7.007	86.3	3.42
28.7	0.051662	33.41	0.489	7.079	63.1	3.415
22.6	0.045776	33.41	0.489	6.417	66.1	3.0925
22	0.038567	33.41	0.489	6.405	73.9	3.0925
22.9	0.041171	45.04	0.464	6.442	53.6	3.665
25	0.028344	45.04	0.464	6.211	28.9	3.6675

20.6	0.042044	45.04	0.464	6.249	77.3	3.615
28.4	0.115148	32.89	0.445	6.625	57.8	3.495
21.4	0.10889	32.89	0.445	6.163	69.6	3.495
38.7	0.114069	32.89	0.445	8.069	76	3.495
43.8	0.078691	32.89	0.445	7.82	36.9	3.4975
33.2	0.066349	32.89	0.445	7.416	62.5	3.4975
27.5	0.138596	38.56	0.52	6.727	79.9	2.7775
26.5	0.108244	38.56	0.52	6.781	71.3	2.8575
18.6	0.206006	38.56	0.52	6.405	85.4	2.715
19.3	0.19195	38.56	0.52	6.137	87.4	2.7125
20.1	0.130677	38.56	0.52	6.167	90	2.4225
19.5	0.124534	38.56	0.52	5.851	96.7	2.105
19.5	0.158029	38.56	0.52	5.836	91.9	2.21
20.4	0.123252	38.56	0.52	6.127	85.2	2.1225
19.8	0.120464	38.56	0.52	6.474	97.1	2.435
19.4	0.233989	38.56	0.52	6.229	91.2	2.545
21.7	0.102493	38.56	0.52	6.195	54.4	2.7775
22.8	0.096074	40.01	0.547	6.715	81.6	2.675
18.8	0.116262	40.01	0.547	5.913	92.9	2.3525
18.7	0.200587	40.01	0.547	6.092	95.4	2.5475
18.5	0.133053	40.01	0.547	6.254	84.2	2.255
18.3	0.158148	40.01	0.547	5.928	88.2	2.4625
21.2	0.123615	40.01	0.547	6.176	72.5	2.73
19.2	0.140614	40.01	0.547	6.021	82.6	2.7475
20.4	0.122731	40.01	0.547	5.872	73.1	2.4775
19.3	0.135195	40.01	0.547	5.731	65.2	2.7575
22	0.066714	55.65	0.581	5.87	69.7	2.2575
20.3	0.0692	55.65	0.581	6.004	84.1	2.1975
20.5	0.088917	55.65	0.581	5.961	92.9	2.09
17.3	0.140092	55.65	0.581	5.856	97	1.945
18.8	0.093937	55.65	0.581	5.879	95.8	2.0075
21.4	0.156166	55.65	0.581	5.986	88.4	1.99
15.7	0.327395	55.65	0.581	5.613	95.6	1.755
16.2	0.230437	51.89	0.624	5.693	96	1.7875
18	0.281737	51.89	0.624	6.431	98.8	1.815
14.3	0.631936	51.89	0.624	5.637	94.7	1.9825
19.2	0.292714	51.89	0.624	6.458	98.9	2.1175
19.6	0.785243	51.89	0.624	6.326	97.7	2.27
23	0.463765	51.89	0.624	6.372	97.9	2.3275
18.4	0.285044	51.89	0.624	5.822	95.4	2.4725
15.6	0.681161	51.89	0.624	5.757	98.4	2.3475
18.1	0.443262	51.89	0.624	6.335	98.2	2.11
17.4	0.27963	51.89	0.624	5.942	93.5	1.9675
17.1	0.301829	51.89	0.624	6.454	98.4	1.85
13.3	0.222984	51.89	0.624	5.857	98.2	1.6675
17.8	0.434713	51.89	0.624	6.151	97.9	1.6675
14	0.25534	51.89	0.624	6.174	93.6	1.6125
14.4	0.966467	51.89	0.624	5.019	100	1.44
13.4	1.463498	49.58	0.871	5.403	100	1.3225
15.6	1.628731	49.58	0.871	5.468	100	1.4125

11.8	1.329655	49.58	0.871	4.903	97.8	1.345
13.8	1.21768	49.58	0.871	6.13	100	1.42
15.6	1.149004	49.58	0.871	5.628	100	1.515
14.6	1.214503	49.58	0.871	4.926	95.7	1.46
17.8	1.20327	49.58	0.871	5.186	93.8	1.5325
15.4	1.317472	49.58	0.871	5.597	94.9	1.5225
21.5	0.977047	49.58	0.871	6.122	97.3	1.6175
19.6	0.914818	49.58	0.871	5.404	100	1.59
15.3	0.754515	49.58	0.871	5.012	88	1.61
19.4	1.147142	49.58	0.871	5.709	98.5	1.6225
17	0.881223	49.58	0.871	6.129	96	1.7475
15.6	1.511827	49.58	0.871	6.152	82.6	1.7475
13.1	1.237411	49.58	0.871	5.272	94	1.735
41.3	0.799119	49.58	0.605	6.943	97.4	1.8775
24.3	0.851364	49.58	0.605	6.066	100	1.7575
23.3	0.88584	49.58	0.871	6.51	100	1.7675
27	0.821303	49.58	0.605	6.25	92.6	1.8
50	0.901526	49.58	0.605	7.489	90.8	1.97
50	1.041608	49.58	0.605	7.802	98.2	2.0425
50	0.92387	49.58	0.605	8.375	93.9	2.1625
22.7	1.176301	49.58	0.605	5.854	91.8	2.4225
25	1.367112	49.58	0.605	6.101	93	2.2825
50	1.102003	49.58	0.605	7.929	96.2	2.0475
23.8	1.029719	49.58	0.605	5.877	79.2	2.425
23.8	1.194044	49.58	0.605	6.319	96.1	2.1
22.3	1.238238	49.58	0.605	6.402	95.2	2.2625
17.4	0.791824	49.58	0.605	5.875	94.6	2.425
19.1	1.198126	49.58	0.605	5.88	97.3	2.39
23.1	0.130274	34.05	0.51	5.572	88.5	2.5975
23.6	0.087809	34.05	0.51	6.416	84.1	2.6475
22.6	0.081091	34.05	0.51	5.859	68.7	2.7025
29.4	0.064514	34.05	0.51	6.546	33.1	3.13
23.2	0.067864	34.05	0.51	6.02	47.2	3.555
24.6	0.05283	34.05	0.51	6.315	73.4	3.32
29.9	0.064307	34.05	0.51	6.86	74.4	2.9125
37.2	0.056191	32.46	0.488	6.98	58.4	2.83
39.8	0.063801	32.46	0.488	7.765	83.3	2.74
36.2	0.066611	32.46	0.488	6.144	62.2	2.5975
37.9	0.087122	32.46	0.488	7.155	92.2	2.6975
32.5	0.095383	32.46	0.488	6.563	95.6	2.845
26.4	0.079809	32.46	0.488	5.604	89.8	2.99
29.6	0.058712	32.46	0.488	6.153	68.8	3.28
50	0.054507	32.46	0.488	7.831	53.6	3.2
32	0.075803	33.44	0.437	6.782	41.1	3.7875
29.8	0.118485	33.44	0.437	6.556	29.1	4.5675
34.9	0.080381	33.44	0.437	7.185	38.9	4.5675
33	0.086801	33.44	0.437	6.951	21.5	6.48
30.5	0.066827	33.44	0.437	6.739	30.8	6.48
36.4	0.08309	33.44	0.437	7.178	26.3	6.4775
31.1	0.021634	32.93	0.401	6.8	9.9	6.22

29.1	0.014287	32.93	0.401	6.604	18.8	6.22
50	0.013716	30.46	0.422	7.875	32	5.65
33.3	0.039326	31.52	0.404	7.287	34.1	7.31
30.3	0.045604	31.52	0.404	7.107	36.6	7.31
34.6	0.036987	31.52	0.404	7.274	38.3	7.31
34.9	0.031014	31.47	0.403	6.975	15.3	7.6525
32.9	0.017624	31.47	0.403	7.135	13.9	7.6525
24.1	0.03387	32.03	0.415	6.162	38.4	6.2725
42.3	0.021536	32.03	0.415	7.61	15.7	6.2675
48.5	0.034498	32.68	0.4161	7.853	33.2	5.1175
50	0.019891	32.68	0.4161	8.034	31.9	5.12
22.6	0.127883	40.59	0.489	5.891	22.3	3.9475
24.4	0.206762	40.59	0.489	6.326	52.5	4.3575
22.5	0.224734	40.59	0.489	5.783	72.7	4.3525
24.4	0.127399	40.59	0.489	6.064	59.1	4.24
20	0.36166	40.59	0.489	5.344	100	3.875
21.7	0.160808	40.59	0.489	5.96	92.1	3.875
19.3	0.319021	40.59	0.489	5.404	88.6	3.665
22.4	0.196545	40.59	0.489	5.807	53.8	3.6525
28.1	0.131484	40.59	0.489	6.375	32.3	3.945
23.7	0.254293	40.59	0.489	5.412	9.8	3.59
25	0.18067	40.59	0.489	6.182	42.4	3.9475
23.3	0.044591	43.89	0.55	5.888	56	3.1125
28.7	0.06778	43.89	0.55	6.642	85.1	3.42
21.5	0.104981	43.89	0.55	5.951	93.8	2.89
23	0.108182	43.89	0.55	6.373	92.4	3.365
26.7	0.306079	36.2	0.507	6.951	88.5	2.86
21.7	0.341964	36.2	0.507	6.164	91.3	3.0475
27.5	0.484621	36.2	0.507	6.879	77.7	3.2725
30.1	0.479149	36.2	0.507	6.618	80.8	3.27
44.8	0.274088	36.2	0.504	8.266	78.3	2.895
50	0.423259	36.2	0.504	8.725	83	2.8925
37.6	0.323633	36.2	0.504	8.04	86.5	3.215
31.6	0.345276	36.2	0.504	7.163	79.9	3.2175
46.7	0.260971	36.2	0.504	7.686	17	3.3775
31.5	0.365878	36.2	0.504	6.552	21.4	3.3725
24.3	0.429832	36.2	0.504	5.981	68.1	3.675
31.7	0.380462	36.2	0.504	7.412	76.9	3.6725
41.7	0.454439	36.2	0.507	8.337	73.3	3.84
48.3	0.286284	36.2	0.507	8.247	70.4	3.65
29	0.370121	36.2	0.507	6.726	66.5	3.6525
24	0.285517	36.2	0.507	6.086	61.5	3.65
25.1	0.419092	36.2	0.507	6.631	76.5	4.1475
31.5	0.413321	36.2	0.507	7.358	71.6	4.1475
23.7	0.079218	34.93	0.428	6.481	18.5	6.19
23.3	0.088487	34.93	0.428	6.606	42.2	6.19
27	0.10732	34.93	0.428	6.897	54.3	6.335
20.1	0.100858	34.93	0.428	6.095	65.1	6.335
22.2	0.097943	34.93	0.428	6.358	52.9	7.035
23.7	0.120065	34.93	0.428	6.393	7.8	7.0375

17.6	0.187375	35.86	0.431	5.593	76.5	7.955
18.5	0.17507	35.86	0.431	5.605	70.2	7.955
24.3	0.292543	35.86	0.431	6.108	34.9	8.055
20.5	0.179459	35.86	0.431	6.226	79.2	8.055
24.5	0.152197	35.86	0.431	6.433	49.1	7.8275
26.2	0.174567	35.86	0.431	6.718	17.5	7.825
24.4	0.131291	35.86	0.431	6.487	13	7.3975
24.8	0.193995	35.86	0.431	6.438	8.9	7.3975
29.6	0.079005	35.86	0.431	6.957	6.8	8.905
42.8	0.314037	35.86	0.431	8.259	8.4	8.9075
21.9	0.047065	33.64	0.392	6.108	32	9.2175
20.9	0.034865	33.64	0.392	5.876	19.1	9.22
44	0.015263	33.75	0.394	7.454	34.2	6.335
50	0.47719	33.97	0.647	8.704	86.9	1.8025
36	0.50893	33.97	0.647	7.333	100	1.8925
30.1	0.504797	33.97	0.647	6.842	100	2.0125
33.8	0.431854	33.97	0.647	7.203	81.8	2.1125
43.1	0.427957	33.97	0.647	7.52	89.4	2.1375
48.8	0.418802	33.97	0.647	8.398	91.5	2.2875
31	0.601722	33.97	0.647	7.327	94.5	2.08
36.5	0.4383	33.97	0.647	7.206	91.6	1.93
22.8	0.566234	33.97	0.647	5.56	62.8	1.985
30.7	0.57981	33.97	0.647	7.014	84.6	2.1325
50	0.456374	33.97	0.575	8.297	67	2.42
43.5	0.432107	33.97	0.575	7.47	52.6	2.87
20.7	0.086774	36.96	0.464	5.92	61.5	3.9175
21.1	0.261718	36.96	0.464	5.856	42.1	4.43
25.2	0.150237	36.96	0.464	6.24	16.3	4.43
24.4	0.108496	36.96	0.464	6.538	58.7	3.9175
35.2	0.200391	36.96	0.464	7.691	51.8	4.3675
32.4	0.054905	36.41	0.447	6.758	32.9	4.08
32	0.091704	36.41	0.447	6.854	42.8	4.2675
33.2	0.099565	36.41	0.447	7.267	49	4.7875
33.1	0.059466	36.41	0.447	6.826	27.6	4.8625
29.1	0.076757	36.41	0.447	6.482	32.1	4.1375
35.1	0.190934	33.33	0.4429	6.812	32.2	4.1
45.4	0.035155	33.33	0.4429	7.82	64.5	4.695
35.4	0.03638	33.33	0.4429	6.968	37.2	5.245
46	0.059485	33.33	0.4429	7.645	49.7	5.21
50	0.014898	31.21	0.401	7.923	24.8	5.885
32.2	0.009019	32.97	0.4	7.088	20.8	7.3075
22	0.0109	32.25	0.389	6.453	31.9	7.3075
20.1	0.019459	31.76	0.385	6.23	31.5	9.0875
23.2	0.03798	35.32	0.405	6.209	31.3	7.32
22.3	0.044878	35.32	0.405	6.315	45.6	7.3175
24.8	0.042072	35.32	0.405	6.565	22.9	7.3175
28.5	0.034421	34.95	0.411	6.861	27.9	5.1175
37.3	0.075905	34.95	0.411	7.148	27.7	5.1175
27.9	0.035512	34.95	0.411	6.63	23.4	5.1175
23.9	0.079412	43.92	0.437	6.127	18.4	5.505

21.7	0.078802	43.92	0.437	6.009	42.3	5.5025
28.6	0.121616	43.92	0.437	6.678	31.1	5.96
27.1	0.052327	43.92	0.437	6.549	51	5.9625
20.3	0.131931	43.92	0.437	5.79	58	6.32
22.5	0.062655	32.24	0.4	6.345	20.1	7.8275
29	0.054119	32.24	0.4	7.041	10	7.83
24.8	0.043222	32.24	0.4	6.871	47.4	7.8275
22	0.034759	36.09	0.433	6.59	40.4	5.495
26.4	0.088615	36.09	0.433	6.495	18.4	5.49
33.1	0.09531	36.09	0.433	6.982	17.7	5.4925
36.1	0.053683	32.18	0.472	7.236	41.1	4.0225
28.4	0.053342	32.18	0.472	6.616	58.1	3.37
33.4	0.072349	32.18	0.472	7.42	71.9	3.1
28.2	0.048142	32.18	0.472	6.849	70.3	3.1825
22.8	0.400774	39.9	0.544	6.635	82.5	3.3175
20.3	0.29966	39.9	0.544	5.972	76.7	3.1025
16.1	1.290741	39.9	0.544	4.973	37.8	2.5175
22.1	0.582445	39.9	0.544	6.122	52.8	2.6375
19.4	0.232452	39.9	0.544	6.023	90.4	2.8325
21.6	0.238529	39.9	0.544	6.266	82.8	3.2625
23.8	0.314227	39.9	0.544	6.567	87.3	3.605
16.2	0.225988	39.9	0.544	5.705	77.7	3.945
17.8	0.27632	39.9	0.544	5.914	83.2	3.9975
19.8	0.219312	39.9	0.544	5.782	71.7	4.035
23.1	0.337914	39.9	0.544	6.382	67.2	3.5325
21	0.388977	39.9	0.544	6.113	58.8	4.0025
23.8	0.15495	37.38	0.493	6.426	52.3	4.5425
23.1	0.166861	37.38	0.493	6.376	54.3	4.54
20.4	0.300949	37.38	0.493	6.041	49.9	4.7225
18.5	0.249918	37.38	0.493	5.708	74.3	4.72
25	0.293483	37.38	0.493	6.415	40.1	4.72
24.6	0.175515	37.38	0.493	6.431	14.7	5.4175
23	0.26503	37.38	0.493	6.312	28.9	5.4175
22.2	0.215942	37.38	0.493	6.083	43.7	5.415
19.3	0.064073	33.24	0.46	5.868	25.8	5.2175
22.6	0.065076	33.24	0.46	6.333	17.2	5.215
19.8	0.044438	33.24	0.46	6.144	32.2	5.875
17.1	0.049009	36.06	0.4379	5.706	28.4	6.64
19.4	0.034073	36.06	0.4379	6.031	23.3	6.64
22.2	0.04958	35.19	0.515	6.316	38.1	6.4575
20.7	0.036698	35.19	0.515	6.31	38.5	6.46
21.1	0.038846	35.19	0.515	6.037	34.5	5.985
19.5	0.033696	35.19	0.515	5.869	46.3	5.23
18.5	0.029957	35.19	0.515	5.895	59.6	5.615
20.6	0.032525	35.19	0.515	6.059	37.3	4.8125
19	0.053512	35.19	0.515	5.985	45.4	4.8125
18.7	0.059692	35.19	0.515	5.968	58.5	4.8125
32.7	0.012926	31.52	0.442	7.241	49.3	7.0375
16.5	0.024673	31.89	0.518	6.54	59.7	6.2675
23.9	0.025112	33.78	0.484	6.696	56.4	5.7325

31.2	0.030034	33.78	0.484	6.874	28.1	6.465
17.5	0.030655	34.39	0.442	6.014	48.5	8.0125
17.2	0.059796	34.39	0.442	5.898	52.3	8.015
23.1	0.018527	34.15	0.429	6.516	27.7	8.5375
24.5	0.014898	32.01	0.435	6.635	29.7	8.3425
26.6	0.028578	31.25	0.429	6.939	34.5	8.795
22.9	0.060257	31.25	0.429	6.49	44.4	8.7925
24.1	0.076498	31.69	0.411	6.579	35.9	10.7125
18.6	0.069936	31.69	0.411	5.884	18.5	10.7125
30.1	0.016946	32.02	0.41	6.728	36.1	12.1275
18.2	0.042111	31.91	0.413	5.663	21.9	10.585
20.6	0.101283	31.91	0.413	5.936	19.5	10.585
17.8	2.30088	48.1	0.77	6.212	97.4	2.1225
21.7	1.578917	48.1	0.77	6.395	91	2.505
22.7	1.824835	48.1	0.77	6.127	83.4	2.7225
22.6	1.66038	48.1	0.77	6.112	81.3	2.5075
25	1.712341	48.1	0.77	6.398	88	2.5175
19.9	1.576262	48.1	0.77	6.251	91.1	2.295
20.8	1.542918	48.1	0.77	5.362	96.2	2.105
16.8	1.652955	48.1	0.77	5.803	89	1.905
21.9	1.498345	48.1	0.718	8.78	82.9	1.905
27.5	1.714855	48.1	0.718	3.561	87.9	1.6125
21.9	1.546913	48.1	0.718	4.963	91.4	1.75
23.1	2.675679	48.1	0.631	3.863	100	1.5075
50	1.774651	48.1	0.631	4.97	100	1.3325
50	1.897617	48.1	0.631	6.683	96.8	1.355
50	2.020058	48.1	0.631	7.016	97.5	1.2
50	2.325549	48.1	0.631	6.216	100	1.17
50	2.226487	48.1	0.668	5.875	89.6	1.1275
13.8	2.493875	48.1	0.668	4.906	100	1.175
13.8	2.970322	48.1	0.668	4.138	100	1.1375
15	3.025733	48.1	0.671	7.313	97.9	1.3175
13.9	2.790429	48.1	0.671	6.649	93.3	1.345
13.3	2.381719	48.1	0.671	6.794	98.8	1.3575
13.1	3.204704	48.1	0.671	6.38	96.2	1.385
10.2	2.937398	48.1	0.671	6.223	100	1.3875
10.4	4.499545	48.1	0.671	6.968	91.9	1.4175
10.9	2.825798	48.1	0.671	6.545	99.1	1.5175
11.3	2.321114	48.1	0.7	5.536	100	1.5775
12.3	2.196389	48.1	0.7	5.52	100	1.535
8.8	3.048557	48.1	0.7	4.368	91.2	1.44
7.2	2.879861	48.1	0.7	5.277	98.1	1.4275
10.5	3.234505	48.1	0.7	4.652	100	1.4675
7.4	3.161124	48.1	0.7	5	89.5	1.52
10.2	2.730053	48.1	0.7	4.88	100	1.59
11.5	2.213944	48.1	0.7	5.39	98.9	1.73
15.1	2.074699	48.1	0.7	5.713	97	1.925
23.2	1.839446	48.1	0.7	6.051	82.5	2.17
9.7	2.531941	48.1	0.7	5.036	97	1.77
13.8	2.266415	48.1	0.693	6.193	92.6	1.7925

12.7	2.664433	48.1	0.693	5.887	94.7	1.7825
13.1	2.273851	48.1	0.693	6.471	98.8	1.725
12.5	1.927462	48.1	0.693	6.405	96	1.675
8.5	2.160102	48.1	0.693	5.747	98.9	1.635
5	3.672542	48.1	0.693	5.453	100	1.49
6.3	2.39028	48.1	0.693	5.852	77.8	1.5
5.6	3.259868	48.1	0.693	5.987	100	1.59
7.2	2.723674	48.1	0.693	6.343	100	1.575
12.1	2.360449	48.1	0.693	6.404	100	1.6375
8.3	3.25044	48.1	0.693	5.349	96	1.7025
8.5	3.750191	48.1	0.693	5.531	85.4	1.6075
5	4.232958	48.1	0.693	5.683	100	1.425
11.9	3.078059	48.1	0.659	4.138	100	1.1775
27.9	2.561181	48.1	0.659	5.608	100	1.2875
17.2	2.128695	48.1	0.597	5.617	97.9	1.455
27.5	2.736851	48.1	0.597	6.852	100	1.465
15	3.953852	48.1	0.597	5.757	100	1.4125
17.2	2.711425	48.1	0.597	6.657	100	1.5275
17.9	2.986237	48.1	0.597	4.628	100	1.555
16.3	3.389658	48.1	0.597	5.155	100	1.5875
7	3.844731	48.1	0.693	4.519	100	1.6575
7.2	2.948882	48.1	0.679	6.434	100	1.835
7.5	2.470994	48.1	0.679	6.782	90.8	1.82
10.4	3.293634	48.1	0.679	5.304	89.1	1.65
8.8	4.311257	48.1	0.679	5.957	100	1.8
8.4	2.550406	48.1	0.718	6.824	76.5	1.7925
16.7	2.492164	48.1	0.718	6.411	100	1.8575
14.2	2.082261	48.1	0.718	6.006	95.3	1.875
20.8	2.56865	48.1	0.614	5.648	87.6	1.9525
13.4	2.085724	48.1	0.614	6.103	85.1	2.0225
11.7	2.281578	48.1	0.584	5.565	70.6	2.065
8.3	2.824962	48.1	0.679	5.896	95.4	1.91
10.2	2.583786	48.1	0.584	5.837	59.7	1.9975
10.9	3.654855	48.1	0.679	6.202	78.7	1.8625
11	2.124309	48.1	0.679	6.193	78.1	1.9375
9.5	2.335913	48.1	0.679	6.38	95.6	1.9675
14.5	2.250463	48.1	0.584	6.348	86.1	2.055
14.1	2.403543	48.1	0.584	6.833	94.3	2.0875
16.1	2.007415	48.1	0.584	6.425	74.8	2.2
14.3	1.884197	48.1	0.713	6.436	87.9	2.3175
11.7	2.70226	48.1	0.713	6.208	95	2.2225
13.4	2.498185	48.1	0.74	6.629	94.6	2.125
9.6	2.735717	48.1	0.74	6.461	93.3	2
8.2	2.783603	48.1	0.74	6.152	100	1.9125
8.4	2.686357	48.1	0.74	5.935	87.9	1.82
12.8	2.340904	48.1	0.74	5.627	93.9	1.8175
10.5	3.137713	48.1	0.74	5.818	92.4	1.865
17.1	2.372501	48.1	0.74	6.406	97.2	2.0675
14.8	1.897075	48.1	0.74	6.219	100	2.005
15.4	2.394849	48.1	0.74	6.485	100	1.9775

10.8	2.624835	48.1	0.74	5.854	96.6	1.8975
11.8	2.457176	48.1	0.74	6.459	94.8	1.9875
14.9	1.986239	48.1	0.74	6.341	96.4	2.07
12.6	2.39104	48.1	0.74	6.251	96.6	2.1975
14.1	2.334964	48.1	0.713	6.185	98.7	2.26
13	2.143121	48.1	0.713	6.417	98.3	2.185
13.4	2.043519	48.1	0.713	6.749	92.6	2.32
15.2	1.862706	48.1	0.713	6.655	98.2	2.355
16.1	1.806676	48.1	0.713	6.297	91.8	2.3675
17.8	2.224417	48.1	0.713	7.393	99.3	2.4525
14.4	2.352673	48.1	0.713	6.728	94.1	2.4975
14.1	1.749612	48.1	0.713	6.525	86.5	2.435
12.7	1.734983	48.1	0.713	5.976	87.9	2.58
13.5	2.219267	48.1	0.713	5.936	80.3	2.78
14.9	2.169309	48.1	0.713	6.301	83.7	2.785
20	2.054274	48.1	0.713	6.081	84.4	2.7175
16.4	1.759947	48.1	0.713	6.701	90	2.5975
17.7	1.546095	48.1	0.713	6.376	88.4	2.565
19.5	2.035349	48.1	0.713	6.317	83	2.735
20.2	1.920028	48.1	0.713	6.513	89.9	2.8025
21.4	2.17921	48.1	0.655	6.209	65.4	2.965
19.9	1.42638	48.1	0.655	5.759	48.2	3.065
19	1.56339	48.1	0.655	5.952	84.7	2.8725
19.1	1.690516	48.1	0.584	6.003	94.5	2.54
19.1	2.807938	48.1	0.58	5.926	71	2.91
20.1	2.644407	48.1	0.58	5.713	56.7	2.825
19.9	1.67687	48.1	0.58	6.167	84	3.035
19.6	1.617091	48.1	0.532	6.229	90.7	3.0975
23.2	1.519224	48.1	0.58	6.437	75	2.895
29.8	1.731105	48.1	0.614	6.98	67.6	2.5325
13.8	2.203404	48.1	0.584	5.427	95.4	2.4275
13.3	2.00055	48.1	0.584	6.162	97.4	2.205
16.7	1.770095	48.1	0.614	6.484	93.6	2.3025
12	2.77405	48.1	0.614	5.304	97.3	2.1025
14.6	2.418856	48.1	0.614	6.185	96.7	2.17
21.4	2.730053	48.1	0.614	6.229	88	1.95
23	1.920447	48.1	0.532	6.242	64.7	3.4225
23.7	1.903328	48.1	0.532	6.75	74.9	3.33
25	1.906747	48.1	0.532	7.061	77	3.41
21.8	1.339826	48.1	0.532	5.762	40.3	4.1
20.6	1.217453	48.1	0.583	5.871	41.9	3.7225
21.2	1.541945	48.1	0.583	6.312	51.9	3.99
19.1	1.900875	48.1	0.583	6.114	79.8	3.545
20.6	1.763989	48.1	0.583	5.905	53.2	3.15
15.2	0.140509	57.74	0.609	5.454	92.7	1.82
7	0.168366	57.74	0.609	5.414	98.3	1.7575
8.1	0.188519	57.74	0.609	5.093	98	1.8225
13.6	0.100515	57.74	0.609	5.983	98.8	1.8675
20.1	0.105548	57.74	0.609	5.983	83.5	2.1075
21.8	0.159829	39.69	0.585	5.707	54	2.3825

24.5	0.246524	39.69	0.585	5.926	42.6	2.38
23.1	0.164658	39.69	0.585	5.67	28.8	2.8
19.7	0.254332	39.69	0.585	5.39	72.9	2.7975
18.3	0.23774	39.69	0.585	5.794	70.6	2.8925
21.2	0.214401	39.69	0.585	6.019	65.3	2.4075
17.5	0.163674	39.69	0.585	5.569	73.5	2.4
16.8	0.202435	39.69	0.585	6.027	79.7	2.4975
22.4	0.060747	41.93	0.573	6.593	69.1	2.4775
20.6	0.044275	41.93	0.573	6.12	76.7	2.2875
23.9	0.058986	41.93	0.573	6.976	91	2.1675
22	0.103991	41.93	0.573	6.794	89.3	2.39
19	0.04632	41.93	0.573	6.03	80.8	2.505

Beta7	Beta8	Beta9	Beta10	Beta11	Beta12	Beta13	Beta14
1.006887	-0.57728	0.329259	0.09188	0.016107	1.131717	-0.29123	0.26426993
teachers	**poor_pro**	**n_hos_be**	**n_hot_roo**	**rainfall**	**Airpot_Ye**	**River**	**Lake**
24.7	4.98	5.48	11.192	23	1	1	0
22.2	9.14	7.332	12.1728	42	0	0	1
22.2	4.03	7.394	46.2	38	0	0	0
21.3	2.94	9.268	11.2672	45	1	0	1
21.3	5.33	8.824	11.2896	55	0	0	1
21.3	5.21	7.174	14.2296	53	1	0	0
24.8	12.43	6.958	12.1832	41	1	1	0
24.8	19.15	5.842	12.1768	56	0	0	1
24.8	29.93	5.93	12.132	55	1	0	0
24.8	17.1	9.478	14.1512	45	1	1	0
24.8	20.45	6	11.12	29	0	0	1
24.8	13.27	9.278	13.1512	23	0	0	0
24.8	15.71	5.534	10.1736	57	1	0	0
19	8.26	5.908	14.1632	39	1	0	0
19	10.26	6.964	13.1456	49	0	0	0
19	8.47	8.498	14.1592	28	1	1	0
19	6.58	5.462	10.1848	46	0	0	0
19	14.67	5.45	11.14	56	0	0	1
19	11.69	8.504	12.1616	41	1	0	0
19	11.28	8.564	12.1456	27	0	0	0
19	21.02	8.272	15.1088	44	1	0	0
19	13.83	9.192	14.1568	23	1	0	0
19	18.72	5.804	14.1216	48	1	1	0
19	19.88	7.49	13.116	29	1	0	1
19	16.3	8.212	13.1248	27	1	0	1
19	16.51	9.378	13.1112	35	1	1	0
19	14.81	9.732	12.1328	59	0	0	1
19	17.28	8.696	13.1184	20	1	0	1
19	12.8	5.968	15.1472	35	1	1	0
19	11.98	9.02	12.168	50	0	1	0
19	22.6	9.854	12.1016	34	0	0	1
19	13.04	9.29	12.116	23	1	0	0
19	27.71	8.764	14.1056	25	0	1	0
19	18.35	8.362	15.1048	25	1	0	0
19	20.34	9.67	11.108	40	1	0	0
20.8	9.68	9.478	11.1512	43	1	1	0
20.8	11.41	7.5	15.16	39	0	0	0
20.8	8.77	8.12	10.168	21	1	1	0
20.8	10.13	8.184	10.1936	21	1	1	0
21.7	4.32	6.916	12.2464	49	1	1	0
21.7	1.98	6.198	15.2792	20	1	1	0
22.1	4.84	7.732	13.2128	30	0	0	0
22.1	5.81	8.106	15.2024	52	0	1	0
22.1	7.44	6.094	15.1976	56	1	1	0

22.1	9.55	9.024	12.1696	53	0	1	0
22.1	10.21	8.086	11.1544	21	0	1	0
22.1	14.15	9.3	12.16	39	1	0	1
22.1	18.8	5.332	12.1328	44	1	1	0
22.1	30.81	7.088	14.1152	34	0	0	0
22.1	16.2	5.988	13.1552	45	0	0	0
23.2	13.45	7.899767	11.1576	21	1	1	0
23.2	9.43	7.01	11.164	30	1	0	1
23.2	5.28	9.9	14.2	56	0	1	0
23.2	8.43	9.168	11.1872	41	0	1	0
18.9	14.8	8.678	15.1512	55	1	0	0
22.1	4.81	7.508	13.2832	50	1	1	0
22.7	5.77	5.794	15.1976	22	1	0	1
24.9	3.95	7.432	15.2528	45	1	0	1
20.3	6.86	7.866	14.1864	22	0	0	0
20.3	9.22	6.192	14.1568	20	1	0	0
20.3	13.15	7.974	11.1496	30	0	1	0
20.3	14.44	6.22	15.128	48	0	1	0
20.3	6.73	5.844	10.1776	56	1	0	0
20.3	9.5	5.9	13.2	28	1	0	0
21.4	8.05	8.26	10.264	30	1	0	0
23.9	4.67	9.47	12.188	20	0	1	0
23.9	10.24	8.988	11.1552	44	0	0	0
21.1	8.1	7.14	13.176	29	1	1	0
21.1	13.09	8.848	15.1392	40	0	1	0
21.1	8.79	8.318	11.1672	56	0	0	1
20.8	6.72	9.784	14.1936	38	1	1	0
20.8	9.88	10.034	13.1736	46	0	0	0
20.8	5.52	5.856	10.1824	20	0	1	0
20.8	7.54	5.968	12.1872	45	1	0	1
21.3	6.78	7.882	10.1928	40	0	1	0
21.3	8.94	6.028	10.1712	28	0	0	0
21.3	11.97	7.3	12.16	22	0	0	0
21.3	10.27	5.916	11.1664	57	1	1	0
21.3	12.34	8.824	15.1696	53	1	0	1
21.3	9.1	6.406	15.1624	37	0	0	0
21	5.29	6.46	14.224	54	1	0	1
21	7.22	5.578	12.1912	49	1	0	1
21	6.72	6.096	10.1984	20	0	1	0
21	7.51	7.558	10.1832	34	1	0	1
21.5	9.62	6.678	14.1912	23	0	0	1
21.5	6.53	9.732	12.2128	56	0	1	0
21.5	12.86	5.95	11.18	50	1	1	0
21.5	8.44	7.244	12.1776	43	1	0	0
22.2	5.5	6.972	10.1888	28	0	1	0
22.2	5.7	7.574	15.2296	31	1	0	0
22.2	8.81	7.352	15.1808	58	1	0	1
22.2	8.2	8.24	13.176	23	0	1	0
21.8	8.16	9.158	14.1832	60	0	0	1
21.8	6.21	10.3	14.2	46	0	0	0

21.8	10.59	5.712	13.1648	54	0	0	0
22	6.65	9.968	14.2272	46	0	1	0
22	11.34	10.228	12.1712	21	0	1	0
22	4.21	6.274	12.3096	53	1	1	0
22	3.57	10.876	10.3504	25	1	0	0
22	6.19	6.564	13.2656	31	0	1	0
19.1	9.42	9.65	15.22	24	1	0	1
19.1	7.67	7.23	10.212	58	1	1	0
19.1	10.63	6.772	13.1488	57	0	0	0
19.1	13.44	6.886	14.1544	36	1	0	0
19.1	12.33	7.102	10.1608	20	1	0	0
19.1	16.47	7.89	13.156	57	1	0	0
19.1	18.66	10.29	14.156	20	1	0	1
19.1	14.09	6.008	14.1632	57	1	0	0
19.1	12.27	8.596	10.1584	48	0	0	0
19.1	15.55	9.788	14.1552	41	1	0	0
19.1	13	6.934	10.1736	37	1	0	0
22.2	10.16	5.656	13.1824	34	1	1	0
22.2	16.21	7.899767	15.1504	35	1	1	0
22.2	17.09	10.074	10.1496	59	1	1	0
22.2	10.45	6.67	12.148	39	0	0	0
22.2	15.76	7.566	11.1464	24	0	0	0
22.2	12.04	6.524	13.1696	23	0	0	0
22.2	10.3	9.484	15.1536	28	0	0	0
22.2	15.37	8.008	14.1632	40	1	1	0
22.2	13.61	10.186	11.1544	20	1	1	0
20.9	14.37	7.84	10.176	23	1	1	0
20.9	14.27	9.706	10.1624	39	1	0	0
20.9	17.93	8.91	10.164	51	1	0	0
20.9	25.41	9.146	10.1384	51	1	0	1
20.9	17.58	6.276	13.1504	56	0	1	0
20.9	14.81	8.128	14.1712	22	1	0	1
20.9	27.26	7.714	10.1256	42	0	0	1
18.8	17.19	5.924	15.1296	31	1	0	0
18.8	15.39	8.16	14.144	41	0	0	0
18.8	18.34	7.886	10.1144	30	1	0	1
18.8	12.6	8.984	13.1536	25	1	0	0
18.8	12.26	7.592	12.1568	29	1	0	0
18.8	11.12	8.96	12.184	57	1	0	0
18.8	15.03	10.268	10.1472	58	1	0	0
18.8	17.31	9.012	11.1248	32	0	0	0
18.8	16.96	7.862	11.1448	37	1	1	0
18.8	16.9	10.148	10.1392	37	0	1	0
18.8	14.59	6.942	11.1368	40	1	0	0
18.8	21.32	8.066	14.1064	39	0	1	0
18.8	18.46	8.656	10.1424	29	1	0	1
18.8	24.16	5.68	10.112	28	0	0	1
18.8	34.41	9.988	12.1152	43	1	0	0
25.3	26.82	5.268	13.1072	42	1	1	0
25.3	26.42	7.312	13.1248	25	1	0	0

25.3	29.29	6.636	13.0944	52	1	1	0
25.3	27.8	7.776	10.1104	59	1	1	0
25.3	16.65	5.612	10.1248	32	1	1	0
25.3	29.53	6.892	11.1168	24	0	0	0
25.3	28.32	9.856	14.1424	43	0	0	1
25.3	21.45	10.108	15.1232	48	0	0	0
25.3	14.1	5.53	12.172	34	0	1	0
25.3	13.28	6.492	11.1568	42	0	1	0
25.3	12.12	5.406	10.1224	46	1	0	0
25.3	15.79	6.088	12.1552	58	0	0	0
25.3	15.12	7.44	15.136	48	0	0	0
25.3	15.02	9.912	11.1248	37	0	1	0
25.3	16.14	6.362	10.1048	60	0	1	0
25.3	4.59	8.226	13.3304	57	1	0	0
25.3	6.43	8.886	13.1944	46	0	1	0
25.3	7.39	7.166	12.1864	36	1	0	1
25.3	5.5	8.44	12.216	23	1	0	1
25.3	1.73	10.5	11.4	35	1	0	0
25.3	1.92	8.4	12.4	22	1	0	1
25.3	3.32	8	12.4	57	1	1	0
25.3	11.64	8.354	15.1816	56	1	0	1
25.3	9.81	10	12.2	22	1	1	0
25.3	3.7	8.3	15.4	37	1	1	0
25.3	12.14	10.076	10.1904	22	1	0	1
25.3	11.1	6.676	11.1904	23	0	0	0
25.3	11.32	5.546	15.1784	22	0	0	0
25.3	14.43	7.948	11.1392	28	0	0	1
25.3	12.03	9.782	12.1528	54	0	1	0
23.4	14.69	9.362	12.1848	38	0	1	0
23.4	9.04	9.872	10.1888	59	1	0	0
23.4	9.64	9.752	15.1808	35	1	1	0
23.4	5.33	6.188	12.2352	48	1	0	0
23.4	10.11	8.564	15.1856	49	1	0	1
23.4	6.29	7.092	14.1968	31	1	0	1
23.4	6.92	5.898	11.2392	28	0	0	0
22.2	5.04	9.744	11.2976	50	0	0	1
22.2	7.56	8.496	14.3184	60	1	0	0
22.2	9.45	6.624	15.2896	59	1	1	0
22.2	4.82	9.258	15.3032	56	1	1	0
22.2	5.68	7.35	14.26	60	1	0	1
22.2	13.98	9.928	10.2112	27	1	0	1
22.2	13.15	8.192	11.2368	45	1	0	1
22.2	4.45	6	13.4	35	1	0	1
24.8	6.68	7.84	13.256	23	1	1	0
24.8	4.56	7.596	10.2384	40	1	1	0
24.8	5.39	9.298	14.2792	20	0	1	0
24.8	5.1	6.16	11.264	55	0	0	0
24.8	4.69	8.81	11.244	40	0	0	0
24.8	2.87	10.528	11.2912	40	1	0	1
24.4	5.03	6.822	13.2488	24	0	1	0

24.4	4.38	9.282	14.2328	59	0	1	0
25.6	2.97	8.2	14.4	26	1	1	0
27.4	4.08	7.266	15.2664	20	1	0	0
27.4	8.61	6.906	14.2424	24	1	0	0
27.4	6.62	10.192	14.2768	43	0	0	1
23	4.56	7.998	13.2792	24	1	0	0
23	4.45	5.958	10.2632	22	0	0	1
25.3	7.43	7.782	12.1928	32	1	1	0
25.3	3.11	10.546	14.3384	30	0	0	0
25.3	3.81	8.77	11.388	22	0	0	0
25.3	2.88	8.9	15.4	51	1	1	0
21.4	10.87	7.952	15.1808	26	1	1	0
21.4	10.97	6.688	11.1952	52	1	1	0
21.4	18.06	7.95	10.18	38	1	0	0
21.4	14.66	6.888	14.1952	31	1	0	0
21.4	23.09	7.9	13.16	60	0	0	0
21.4	17.27	8.034	12.1736	36	1	0	0
21.4	23.98	5.986	14.1544	39	0	1	0
21.4	16.03	6.848	13.1792	20	1	1	0
21.4	9.38	7.562	10.2248	6	1	0	0
21.4	29.55	5.674	11.1896	21	1	0	0
21.4	9.47	7.899767	12.2	30	1	0	1
23.6	13.51	5.466	12.1864	22	1	0	0
23.6	9.69	9.274	14.2296	23	0	0	0
23.6	17.92	8.73	14.172	49	1	0	0
23.6	10.5	6.16	13.184	21	1	0	0
22.6	9.71	8.734	11.2136	23	0	1	0
22.6	21.46	5.734	14.1736	37	1	0	0
22.6	9.93	9.45	12.22	50	1	0	0
22.6	7.6	9.702	12.2408	39	1	1	0
22.6	4.14	6.796	12.3584	47	1	0	1
22.6	4.63	7.5	13.4	20	1	1	0
22.6	3.13	5.952	10.3008	54	1	0	0
22.6	6.36	6.332	10.2528	34	0	1	0
22.6	3.92	10.134	14.3736	43	1	0	1
22.6	3.76	7.33	15.252	47	1	0	0
22.6	11.65	8.286	10.1944	59	0	0	0
22.6	5.25	6.734	10.2536	26	1	0	0
22.6	2.47	6.634	11.3336	28	1	1	0
22.6	3.95	9.066	11.3864	23	1	0	0
22.6	8.05	9.88	13.232	32	1	1	0
22.6	10.88	9.18	14.192	57	1	0	0
22.6	9.54	9.402	15.2008	36	1	0	0
22.6	4.73	10.53	12.252	34	1	1	0
23.4	6.36	7.374	12.1896	48	1	0	0
23.4	7.37	5.566	15.1864	51	0	0	0
23.4	11.38	10.24	11.216	24	1	0	0
23.4	12.4	8.302	13.1608	41	0	0	0
23.4	11.22	6.044	10.1776	42	1	1	0
23.4	5.19	7.374	15.1896	26	1	1	0

20.9	12.5	6.252	12.1408	42	0	0	0
20.9	18.46	9.27	10.148	59	1	0	0
20.9	9.16	7.086	11.1944	25	1	0	0
20.9	10.15	9.81	12.164	31	0	1	0
20.9	9.52	8.39	15.196	43	1	1	0
20.9	6.56	9.324	11.2096	39	1	0	0
20.9	5.9	6.188	14.1952	38	1	1	0
20.9	3.59	10.296	12.1984	50	0	0	1
20.9	3.53	8.992	12.2368	57	0	0	0
20.9	3.54	10.856	13.3424	53	0	1	0
23.6	6.57	6.538	12.1752	56	0	1	0
23.6	9.25	7.818	15.1672	31	0	0	0
24.1	3.11	6.68	13.352	38	0	1	0
27	5.12	8.6	11.4	54	1	1	0
27	7.79	8.02	15.288	58	1	1	0
27	6.9	7.302	11.2408	40	1	1	0
27	9.59	7.899767	11.2704	21	1	0	1
27	7.26	6.662	11.3448	24	1	0	0
27	5.91	10.076	15.3904	24	1	1	0
27	11.25	5.72	11.248	60	1	0	0
27	8.1	8.53	14.292	36	1	1	0
27	10.45	7.456	13.1824	59	0	0	0
27	14.79	6.114	10.2456	41	0	1	0
27	7.44	8	15.4	42	1	0	0
27	3.16	9.07	15.348	43	0	0	1
21.4	13.65	10.414	14.1656	29	0	0	0
21.4	13	6.222	15.1688	27	1	0	0
21.4	6.59	6.604	10.2016	25	0	1	0
21.4	7.73	8.488	13.1952	40	1	1	0
21.4	6.58	6.004	10.2816	39	1	1	0
22.4	3.53	10.648	12.2592	30	0	1	0
22.4	2.98	8.84	12.256	23	1	1	0
22.4	6.05	8.564	11.2656	35	0	0	1
22.4	4.16	6.262	11.2648	21	0	1	0
22.4	7.19	6.282	10.2328	38	1	1	0
25.1	4.85	9.602	12.2808	26	0	0	1
25.1	3.76	7.108	10.3632	50	0	0	0
25.1	4.59	8.508	14.2832	48	1	0	0
25.1	3.01	8.72	12.368	25	1	0	1
26.4	3.16	8.7	13.4	20	1	0	1
24.7	7.85	7.844	12.2576	30	1	0	0
24.7	8.23	10.44	14.176	55	1	0	0
21.8	12.93	8.302	10.1608	39	1	0	0
23.4	7.14	9.964	14.1856	60	1	0	1
23.4	7.6	5.846	12.1784	22	0	1	0
23.4	9.51	9.096	14.1984	60	0	0	0
20.8	3.33	8.07	11.228	53	1	1	0
20.8	3.56	8.146	10.2984	37	1	0	0
20.8	4.7	8.458	12.2232	37	0	1	0
24	8.58	7.278	14.1912	46	1	1	0

24	10.4	8.834	11.1736	23	0	0	1
24	6.27	6.972	10.2288	44	1	1	0
24	7.39	10.442	10.2168	26	0	0	0
24	15.84	7.606	11.1624	42	1	0	0
25.2	4.97	9.45	13.18	48	0	0	1
25.2	4.74	7.98	11.232	36	1	0	1
25.2	6.07	9.096	11.1984	29	1	1	0
23.9	9.5	9.94	12.176	21	1	1	0
23.9	8.67	7.928	11.2112	42	1	0	0
23.9	4.86	8.262	14.2648	34	0	0	0
21.6	6.93	6.922	10.2888	55	0	1	0
21.6	8.93	6.568	15.2272	22	0	0	0
21.6	6.47	10.668	12.2672	23	1	1	0
21.6	7.53	10.464	12.2256	46	1	0	0
21.6	4.54	7.156	11.1824	31	0	1	0
21.6	9.97	10.106	11.1624	51	1	0	0
21.6	12.64	7.322	11.1288	27	0	1	0
21.6	5.98	8.242	15.1768	46	1	1	0
21.6	11.72	6.288	13.1552	26	1	0	0
21.6	7.9	8.832	14.1728	33	1	0	0
21.6	9.28	9.576	13.1904	56	1	0	1
21.6	11.5	6.724	12.1296	58	0	1	0
21.6	18.33	7.256	12.1424	43	0	1	0
21.6	15.94	9.796	12.1584	50	0	1	0
21.6	10.36	5.562	10.1848	53	0	0	0
21.6	12.73	10.32	12.168	36	0	0	0
20.4	7.2	6.776	13.1904	48	1	1	0
20.4	6.87	7.762	14.1848	40	1	0	1
20.4	7.7	8.908	13.1632	40	0	0	0
20.4	11.74	6.57	15.148	25	1	0	0
20.4	6.12	8.6	15.2	52	0	1	0
20.4	5.08	7.992	15.1968	45	0	0	0
20.4	6.15	7.06	12.184	36	1	1	0
20.4	12.79	9.044	15.1776	27	0	0	0
23.1	9.97	9.986	10.1544	35	1	0	1
23.1	7.34	5.552	14.1808	53	0	0	0
23.1	9.09	9.396	11.1584	26	0	1	0
23.1	12.43	6.742	14.1368	21	0	0	1
23.1	7.83	7.488	14.1552	22	1	0	0
19.8	5.68	9.144	11.1776	34	0	0	0
19.8	6.75	7.514	15.1656	53	1	0	0
19.8	8.01	8.922	14.1688	57	1	0	0
19.8	9.8	10.09	15.156	53	0	1	0
19.8	10.56	8.27	12.148	21	1	1	0
19.8	8.51	8.112	14.1648	26	1	1	0
19.8	9.74	6.38	11.152	28	0	0	1
19.8	9.29	6.474	13.1496	20	1	0	0
24.5	5.49	6.254	13.2616	48	1	0	0
24.1	8.65	7.33	11.132	40	1	1	0
22.4	7.18	8.978	15.1912	52	1	0	0

22.4	4.61	10.624	11.2496	23	0	1	0
21.2	10.53	7.15	13.14	26	1	0	1
21.2	12.67	6.044	13.1376	46	0	1	0
22.1	6.36	8.162	12.1848	47	1	0	1
23	5.99	6.29	13.196	45	1	0	0
20.3	5.89	5.632	11.2128	30	1	0	0
20.3	5.98	7.258	15.1832	55	0	1	0
21.7	5.49	5.582	10.1928	45	1	1	0
21.7	7.79	7.372	11.1488	50	1	1	0
23	4.5	6.102	12.2408	40	1	0	1
18	8.05	8.764	12.1456	34	0	0	0
18	5.57	9.312	13.1648	53	0	1	0
19.8	17.6	5.956	14.1424	39	0	0	0
19.8	13.27	7.034	13.1736	56	0	0	1
19.8	11.48	6.354	15.1816	42	0	0	0
19.8	12.67	7.899767	14.1808	26	0	0	1
19.8	7.79	8.8	10.2	37	0	0	0
19.8	14.19	8.898	13.1592	56	1	1	0
19.8	10.19	8.016	14.1664	52	0	0	1
19.8	14.64	9.736	15.1344	57	1	0	0
19.8	5.29	8.038	12.1752	26	0	1	0
19.8	7.12	8.05	12.22	51	1	1	0
19.8	14	10.238	14.1752	58	0	0	1
19.8	13.33	9.962	11.1848	24	0	0	1
19.8	3.26	9.7	13.4	41	0	1	0
19.8	3.73	6.7	15.4	58	1	1	0
19.8	2.96	10.1	12.4	46	1	0	0
19.8	9.53	9.8	13.4	25	1	0	0
19.8	8.88	10.8	12.4	57	1	0	0
19.8	34.77	6.876	13.1104	56	1	0	0
19.8	37.97	7.076	13.1104	35	0	0	1
19.8	13.44	8.9	15.12	45	0	0	0
19.8	23.24	9.478	15.1112	26	1	0	0
19.8	21.24	6.066	14.1064	22	1	0	0
19.8	23.69	9.262	14.1048	54	1	0	1
19.8	21.78	7.904	11.0816	46	0	0	0
19.8	17.21	9.408	14.0832	21	1	0	0
19.8	21.08	8.618	10.0872	60	0	0	0
19.8	23.6	8.226	11.0904	46	1	1	0
19.8	24.56	6.746	15.0984	41	0	0	1
19.8	30.63	5.676	14.0704	25	0	1	0
19.8	30.81	10.144	13.0576	36	0	0	0
19.8	28.28	7.71	15.084	34	1	1	0
19.8	31.99	8.348	15.0592	54	0	0	0
19.8	30.62	6.104	10.0816	25	0	0	1
19.8	20.85	6.03	12.092	51	0	0	0
19.8	17.11	9.702	11.1208	20	1	1	0
19.8	18.76	9.664	10.1856	53	1	1	0
19.8	25.68	5.494	14.0776	51	0	0	0
19.8	15.17	9.076	14.1104	55	0	1	0

19.8	16.35	6.754	15.1016	40	0	0	0
19.8	17.12	5.762	15.1048	29	0	0	0
19.8	19.37	5.45	11.1	24	1	1	0
19.8	19.92	9.27	14.068	22	0	0	0
19.8	30.59	9.3	13.04	26	0	0	1
19.8	29.97	6.726	14.0504	42	0	1	0
19.8	26.77	9.212	11.0448	30	1	0	1
19.8	20.32	7.344	10.0576	50	1	0	0
19.8	20.31	5.442	14.0968	42	0	1	0
19.8	19.77	7.899767	15.0664	40	1	1	0
19.8	27.38	8.47	11.068	56	0	0	0
19.8	22.98	7.3	14.04	38	1	1	0
19.8	23.34	8.538	14.0952	53	1	1	0
19.8	12.13	6.658	13.2232	26	1	1	0
19.8	26.4	6.444	12.1376	25	0	1	0
19.8	19.78	7.65	14.22	57	1	0	1
19.8	10.11	9.6	11.12	52	0	1	0
19.8	21.22	9.644	14.1376	44	0	0	0
19.8	34.37	8.358	15.1432	40	0	0	0
19.8	20.08	6.626	14.1304	58	0	1	0
19.8	36.98	6.04	12.056	40	1	1	0
19.8	29.05	8.644	11.0576	59	0	0	0
19.8	25.79	7.899767	10.06	35	1	1	0
19.8	26.64	8.608	15.0832	60	1	0	0
19.8	20.62	8.476	12.0704	52	0	0	0
19.8	22.74	5.968	13.0672	26	0	0	0
19.8	15.02	6.034	13.1336	48	1	0	0
19.8	15.7	8.284	10.1136	29	0	0	0
19.8	14.1	8.916	11.1664	36	0	0	0
19.8	23.29	8.268	46.2	29	0	0	1
19.8	17.16	7.834	11.0936	57	0	0	0
19.8	24.39	5.566	15.0664	51	1	0	1
19.8	15.69	9.104	14.0816	33	0	0	0
19.8	14.52	7.518	11.0872	42	0	0	1
19.8	21.52	8.52	12.088	45	1	1	0
19.8	24.08	8.79	12.076	52	1	0	0
19.8	17.64	9.09	11.116	53	0	1	0
19.8	19.69	6.682	14.1128	29	1	0	1
19.8	12.03	8.722	10.1288	42	1	0	0
19.8	16.22	6.186	10.1144	46	0	0	0
19.8	15.17	7.834	11.0936	37	0	0	0
19.8	23.27	10.168	12.1072	46	0	0	0
19.8	18.05	6.092	10.0768	57	1	1	0
19.8	26.45	9.864	11.0656	60	0	0	0
19.8	34.02	9.568	14.0672	57	1	0	0
19.8	22.88	8.456	15.1024	50	1	0	0
19.8	22.11	7.41	12.084	38	0	0	0
19.8	19.52	9.242	15.1368	58	1	0	0
19.8	16.59	7.096	14.1184	54	0	1	0
19.8	18.85	6.608	14.1232	21	0	1	0

19.8	23.79	5.516	12.0864	34	0	0	0
19.8	23.98	5.336	12.0944	28	1	1	0
19.8	17.79	10.198	15.1192	41	0	0	0
19.8	16.44	9.752	11.1008	37	1	0	0
19.8	18.13	9.082	13.1128	52	1	0	0
19.8	19.31	8.06	12.104	27	1	0	0
19.8	17.44	9.068	13.1072	59	1	0	1
19.8	17.73	8.104	11.1216	41	1	0	0
19.8	17.27	6.722	15.1288	21	0	0	0
19.8	16.74	5.956	11.1424	42	1	1	0
19.8	18.71	5.888	14.1152	34	0	1	0
19.8	18.13	7.782	14.1128	36	0	1	0
19.8	19.01	7.154	15.1016	31	0	1	0
19.8	16.94	8.87	13.108	46	0	0	0
19.8	16.23	5.598	15.1192	39	0	1	0
19.8	14.7	5.4	14.16	27	1	0	1
19.8	16.42	9.428	12.1312	29	1	1	0
19.8	14.65	9.854	13.1416	24	1	0	0
19.8	13.99	5.89	15.156	22	0	1	0
19.8	10.29	8.804	15.1616	30	1	0	0
19.8	13.22	7.828	11.1712	55	0	0	0
19.8	14.13	9.998	12.1592	43	0	0	0
19.8	17.15	8.38	10.152	21	1	0	0
19.8	21.32	9.482	13.1528	21	0	0	0
19.8	18.13	5.882	15.1528	28	0	0	0
19.8	14.76	6.302	13.1608	27	0	0	0
19.8	16.29	5.598	12.1592	36	0	1	0
19.8	12.87	8.692	13.1568	52	1	0	0
19.8	14.36	8.464	15.1856	39	1	0	0
19.8	11.66	7.396	15.2384	56	1	0	0
19.8	18.14	9.076	11.1104	47	0	0	0
19.8	24.1	9.066	11.1064	27	1	0	1
19.8	18.68	6.134	14.1336	22	1	1	0
19.8	24.91	9.34	15.096	39	0	0	1
19.8	18.03	5.292	15.1168	60	1	0	1
19.8	13.11	6.128	10.1712	32	0	1	0
19.8	10.74	8.56	13.184	22	0	1	0
19.8	7.74	6.974	15.1896	46	0	0	0
19.8	7.01	5.5	11.2	29	0	0	1
19.8	10.42	9.636	14.1744	57	0	0	0
19.8	13.34	8.112	12.1648	31	1	0	1
19.8	10.58	9.024	13.1696	51	0	0	0
19.8	14.98	8.582	12.1528	57	1	0	0
19.8	11.45	8.412	11.1648	44	0	0	0
19.9	18.06	6.004	14.1216	28	0	0	0
19.9	23.97	9.84	15.056	29	0	0	0
19.9	29.68	9.162	10.0648	49	1	0	0
19.9	18.07	7.072	14.1088	47	0	0	0
19.9	13.35	8.902	13.1608	57	1	1	0
20.8	12.01	5.936	14.1744	31	1	1	0

20.8	13.59	8.79	11.196	47	1	1	0
20.8	17.6	8.462	14.1848	55	0	0	0
20.8	21.14	7.899767	12.1576	44	0	1	0
20.8	14.1	5.366	14.1464	55	1	0	1
20.8	12.92	5.824	14.1696	32	1	1	0
20.8	15.1	9.85	14.14	47	0	0	1
20.8	14.33	6.236	14.1344	54	0	0	1
19	9.67	9.348	12.1792	27	0	0	0
19	9.08	6.612	13.1648	20	1	0	0
19	5.64	5.478	12.1912	31	0	0	0
19	6.48	7.94	15.176	47	1	0	0
19	7.88	10.28	10.152	45	1	0	0

Beta15		Sum of sqr	11886.9
-0.687360641			
Lake And River	**Forecast**	**Diff-forca**	**Sqr-diff**
0	30.74071	6.740708	45.43714
0	25.38427	3.784269	14.3207
0	34.32427	-0.37573	0.141174
0	31.33692	-2.06308	4.256306
0	29.39653	-6.80347	46.28724
0	27.12355	-1.57645	2.485181
0	23.33904	0.43904	0.192756
0	18.75645	-3.34355	11.17934
0	11.05226	-5.44774	29.67789
0	20.32095	1.42095	2.019098
0	17.8763	2.876301	8.273106
1	20.97367	2.073667	4.300095
1	20.44828	-1.25172	1.566807
0	20.58514	0.185144	0.034278
0	19.47061	1.270612	1.614454
0	20.67202	0.772024	0.596021
0	20.40837	-2.69163	7.24486
0	16.45975	-1.04025	1.082111
1	17.89685	-2.30315	5.304521
1	17.68893	-0.51107	0.261193
1	12.85895	-0.74105	0.549162
0	18.94849	-0.65151	0.424465
0	15.85664	0.656636	0.431171
0	14.38836	-0.11164	0.012464
0	16.76821	1.168211	1.364716
0	15.27848	1.37848	1.900207
0	16.65235	0.052348	0.00274
0	16.71017	1.910169	3.648745
0	20.03497	1.634971	2.673132
0	21.37253	0.372529	0.138778
0	11.91711	-0.78289	0.612921
0	19.42177	4.921771	24.22383
0	9.407145	-3.79286	14.38575
0	15.36679	2.266792	5.138348
0	16.13488	2.634878	6.94258
0	24.49612	5.596117	31.31653
0	21.95771	1.957713	3.83264
0	23.24816	2.248159	5.054221
0	23.12471	-1.07529	1.156254
0	29.54111	-1.25889	1.584809
0	32.22236	-2.67764	7.16975
1	28.1065	1.506503	2.269551
0	26.1668	0.866795	0.751334
0	25.9316	1.231604	1.516848

0	23.45442	2.254419	5.082405
0	21.39219	2.092189	4.377254
0	22.01092	2.010922	4.043809
0	17.5058	0.905802	0.820477
0	7.520463	-6.87954	47.32804
1	15.73489	-3.66511	13.43301
0	20.86841	1.168413	1.365188
0	24.10559	3.605594	13.00031
0	28.29448	3.294476	10.85357
0	23.65639	0.256388	0.065735
0	16.82423	-2.07577	4.308808
0	29.04405	-6.35595	40.39816
0	24.56231	-0.13769	0.018958
0	31.46703	-0.13297	0.01768
0	20.60141	-2.69859	7.282371
0	19.88379	0.283793	0.080538
0	15.44837	-3.25163	10.57309
0	16.02399	0.023987	0.000575
0	23.0694	0.869399	0.755855
1	21.07426	-3.92574	15.41143
1	24.06844	-8.93156	79.77275
0	28.57022	5.070216	25.70709
1	22.99733	3.597325	12.94075
0	22.54994	0.549945	0.302439
0	18.22885	0.828848	0.68699
0	22.17295	1.272948	1.620397
0	27.62467	3.424667	11.72834
1	22.49283	0.792825	0.628572
0	23.80949	1.009487	1.019064
0	25.6877	2.287705	5.233593
0	26.21902	2.119017	4.490232
0	23.97918	2.579181	6.652175
0	23.08959	3.089595	9.545594
0	24.48798	3.687977	13.60118
0	24.30627	3.106271	9.648921
1	22.32283	2.022832	4.091848
0	29.36121	1.361212	1.852899
0	27.04127	3.141268	9.867566
0	24.10759	-0.69241	0.479432
0	25.42184	2.521835	6.359653
0	24.76679	0.866789	0.751323
0	28.68698	2.086982	4.355492
0	22.33441	-0.16559	0.02742
0	26.77018	4.570176	20.88651
0	30.4344	6.834398	46.709
0	32.87966	4.179664	17.46959
0	29.42147	6.821465	46.53239
0	27.53792	5.537916	30.66851
0	28.19316	5.293162	28.01757
1	27.72912	2.729121	7.448099

1	23.66371	3.063708	9.386307
0	30.47439	2.074387	4.303079
0	25.33684	3.93684	15.49871
0	37.43359	-1.26641	1.603795
1	37.5108	-6.2892	39.554
0	32.43743	-0.76257	0.581509
0	27.00868	-0.49132	0.241391
0	26.92253	0.422531	0.178533
1	22.37185	3.771849	14.22684
0	21.27495	1.974947	3.900416
0	21.82074	1.720741	2.96095
0	19.64012	0.140123	0.019635
0	18.76581	-0.73419	0.53904
1	20.95312	0.553122	0.305944
1	22.15674	2.356736	5.554206
0	21.64551	2.245509	5.04231
0	21.53686	-0.16314	0.026616
0	27.38419	4.584188	21.01478
0	21.93308	3.133081	9.816196
0	22.53623	3.836226	14.71663
1	24.65311	6.153115	37.86082
0	20.65091	2.350914	5.526796
0	23.38515	2.185151	4.774887
1	24.23789	5.037891	25.38035
0	22.23968	1.839677	3.384412
0	22.51168	3.211677	10.31487
0	19.91115	-2.08885	4.363306
1	20.97288	0.672876	0.452762
0	19.3868	-1.1132	1.239225
0	15.14015	-2.15985	4.664959
0	17.40804	-1.39196	1.937547
0	21.3445	-0.0555	0.00308
0	11.58768	-4.11232	16.91114
0	15.5961	-0.6039	0.364697
0	19.22686	1.22686	1.505184
0	14.91419	0.614192	0.377232
0	21.63116	2.431158	5.910528
0	20.63724	1.037236	1.075858
1	21.62245	-1.37755	1.897647
1	17.25059	-1.14941	1.321153
1	13.93793	-1.66207	2.762476
0	17.98257	-0.11743	0.01379
0	16.16549	-1.23451	1.524025
0	20.17921	3.079209	9.481531
0	13.32172	0.021717	0.000472
0	17.51414	-0.28586	0.081715
0	12.27546	-1.72454	2.974031
0	4.608918	-9.79108	95.86528
0	11.62425	-1.77575	3.153273
0	12.7003	-2.8997	8.408245

0	8.783301	-3.0167	9.10047
0	14.68305	0.88305	0.779778
0	17.83994	2.239944	5.017347
0	7.219034	-7.38097	54.47866
0	10.70898	-7.09102	50.28253
0	16.32288	0.922881	0.851709
0	20.24763	-1.25237	1.568427
0	18.20551	-1.39449	1.9446
0	18.37739	3.077386	9.470303
0	18.46103	-0.93897	0.881655
1	20.2656	3.265597	10.66413
0	21.16278	5.562777	30.94449
0	16.0352	2.935197	8.615383
0	35.73352	-5.56648	30.98569
0	29.88364	5.583645	31.17709
0	27.74069	4.440685	19.71969
0	32.23018	5.230177	27.35475
0	39.72168	-10.2783	105.6439
0	40.19576	-9.80424	96.1231
0	41.44393	-8.55607	73.20625
0	27.11933	4.419329	19.53047
0	28.49879	3.498792	12.24154
0	39.61329	-10.3867	107.8837
0	26.55148	2.751478	7.570633
0	26.82157	3.021567	9.129868
1	26.12651	3.826512	14.6422
0	23.48253	6.082534	36.99722
0	25.47949	6.379494	40.69794
0	22.3328	-0.7672	0.588602
0	30.69563	7.095632	50.348
0	27.87328	5.273282	27.8075
0	31.86105	2.461052	6.056776
0	27.72309	4.523087	20.45832
0	30.38473	5.784733	33.46313
0	30.59298	0.692981	0.480223
0	33.44931	-3.75069	14.0677
1	35.32422	-4.47578	20.03259
0	27.8664	-8.3336	69.44886
0	35.12888	-2.77112	7.679124
0	31.95017	-0.54983	0.30231
0	23.10655	-3.29345	10.8468
0	25.37091	-4.22909	17.88523
0	36.6367	-13.3633	178.5778
0	33.72194	1.721937	2.965066
0	33.07224	3.272242	10.70757
0	34.54213	-0.35787	0.12807
0	31.08267	-1.91733	3.676151
0	31.04314	0.543137	0.294998
0	35.85286	-0.54714	0.299367
0	30.69903	-0.40097	0.160778

0	31.69979	2.599794	6.758928
0	39.47528	-10.5247	110.7698
1	35.77117	2.471174	6.106702
1	32.27032	1.970316	3.882145
0	35.29145	0.691452	0.478106
0	30.32819	-4.57181	20.90143
0	29.19408	-3.70592	13.73386
0	28.72297	4.622969	21.37184
1	36.71861	-5.58139	31.15189
0	38.25118	-10.2488	105.0383
0	41.23867	-8.76133	76.76084
0	23.35514	0.755142	0.57024
0	24.01021	-0.38979	0.151934
0	18.01392	-4.48608	20.12489
0	21.22635	-3.17365	10.07207
0	13.25315	-6.74685	45.51995
0	19.83025	-1.86975	3.495977
0	12.13289	-7.16711	51.3674
0	19.57477	-2.82523	7.981922
0	25.49147	-2.60853	6.804446
0	10.24895	-13.451	180.9306
0	25.54713	0.547128	0.299349
1	22.19941	-1.10059	1.211288
0	27.90691	-0.79309	0.628985
0	22.3417	0.841697	0.708454
0	26.36212	3.362119	11.30385
0	29.04757	2.34757	5.511085
0	19.79036	-1.90964	3.646729
1	29.69068	2.190685	4.799099
0	30.27602	0.17602	0.030983
0	39.15133	-5.64867	31.90746
0	40.02766	-9.97234	99.4475
1	37.08395	-0.51605	0.266307
0	30.79297	-0.80703	0.651298
0	37.92983	-8.77017	76.91589
0	32.40475	0.904752	0.818576
0	23.83189	-0.46811	0.219127
0	33.32386	1.623859	2.63692
0	38.2226	-3.4774	12.09233
0	38.26939	-10.0306	100.6131
0	30.10175	1.101745	1.213842
0	26.47865	2.478647	6.14369
1	27.89163	2.791632	7.79321
0	34.08219	2.582186	6.667686
1	28.32594	4.625941	21.39933
1	26.70638	3.406381	11.60343
0	27.87346	0.873457	0.762927
0	22.68263	2.582629	6.669971
0	23.47635	1.276353	1.629076
0	27.99385	4.293846	18.43712

0	15.21331	-2.38669	5.696291
0	14.07298	-4.42702	19.59851
0	20.37359	-3.92641	15.41669
0	19.68148	-0.81852	0.669976
0	22.4622	-2.0378	4.152622
0	25.66831	-0.53169	0.282698
0	24.6018	0.201795	0.040721
0	26.54867	1.748667	3.057837
1	25.57785	-4.02215	16.17766
0	31.84127	-10.9587	120.0937
0	22.88162	0.981618	0.963573
0	21.05773	0.157728	0.024878
0	34.1202	-9.8798	97.61039
0	43.94153	-6.05847	36.70502
0	36.93717	0.937171	0.878289
0	34.43338	4.333379	18.77818
0	34.7617	0.9617	0.924867
1	36.00265	-7.09735	50.37241
0	42.00726	-6.79274	46.14138
0	33.91445	2.914448	8.494009
0	35.97158	-0.52842	0.27923
0	27.17381	4.373807	19.13019
0	28.91414	-1.78586	3.189297
0	41.74016	-8.25984	68.22489
0	39.91751	-3.58249	12.83426
1	21.46254	0.762544	0.581474
0	21.56741	0.46741	0.218472
0	25.17164	-0.02836	0.000804
0	28.36145	3.961445	15.69305
0	32.0489	-3.1511	9.929434
0	32.25115	-0.14885	0.022155
0	33.09302	1.093023	1.194699
0	31.74647	-1.45353	2.112744
0	29.55695	-3.54305	12.55319
0	28.60074	-0.49926	0.249265
0	34.74551	-0.35449	0.125661
0	37.63897	-7.76103	60.23365
0	35.14252	-0.25748	0.066295
0	38.53419	-7.46581	55.73831
0	40.95352	-9.04648	81.83884
1	30.23455	-1.96545	3.862976
0	29.72533	7.725328	59.6807
0	19.78204	-0.31796	0.1011
0	27.86257	4.662568	21.73954
0	24.1047	1.804703	3.256954
0	26.29552	1.495522	2.236587
0	31.12405	2.624047	6.885624
0	32.11926	-5.18074	26.84007
0	28.2604	0.360399	0.129887
0	27.06668	3.166683	10.02788

0	24.69657	2.996573	8.97945
0	29.49062	0.890616	0.793198
0	28.21915	1.119148	1.252492
0	20.3586	0.0586	0.003434
0	29.53883	7.038835	49.5452
0	32.79858	3.798579	14.4292
0	30.83278	6.032782	36.39446
0	28.854	6.853996	46.97726
1	28.27483	1.874834	3.515002
0	32.24965	-0.85035	0.723098
0	30.19739	-5.90261	34.84083
0	27.34621	-1.05379	1.110473
0	34.18212	0.78212	0.611712
1	31.08734	2.887342	8.336745
0	28.09992	5.29992	28.08915
0	25.30979	5.009792	25.09802
0	17.96965	1.869654	3.495605
0	28.3054	6.2054	38.50699
0	23.27786	3.877856	15.03777
0	27.02293	5.422928	29.40815
0	27.78286	3.982857	15.86315
0	19.98549	3.785494	14.32997
0	16.72229	-1.07771	1.161459
0	18.54162	-1.25838	1.583526
0	23.57741	0.477411	0.227921
1	21.39164	0.391636	0.153379
0	25.57234	1.772335	3.141172
0	26.39629	3.296294	10.86555
0	23.26246	2.862456	8.193652
0	19.75772	1.257723	1.581868
0	25.7243	0.724301	0.524612
0	25.66104	1.061042	1.12581
0	24.59662	1.59662	2.549195
0	19.70399	-2.49601	6.230071
0	25.5956	6.295604	39.63463
0	26.83867	4.238671	17.96633
0	24.4404	4.640405	21.53336
0	19.95229	2.852289	8.135555
0	25.07371	5.673713	32.19102
0	22.4186	0.218599	0.047785
1	22.35145	1.651451	2.727292
0	22.25262	1.152623	1.328539
0	20.38469	0.884687	0.782671
0	19.24577	0.74577	0.556173
0	22.40767	1.807674	3.267687
0	19.96303	0.963025	0.927418
0	21.0327	2.332698	5.441482
0	32.1142	-0.5858	0.343163
0	26.4646	9.9646	99.29325
1	28.07517	4.175166	17.43202

0	28.52038	-2.67962	7.180389
0	19.84403	2.344033	5.49449
0	16.38854	-0.81146	0.65847
0	25.45398	2.353976	5.541205
0	26.45039	1.95039	3.80402
0	23.91834	-2.68166	7.191283
0	21.8887	-1.0113	1.022725
0	21.87605	-2.22395	4.945939
0	18.61263	0.012634	0.00016
0	23.46578	-6.63422	44.01293
0	13.39556	-4.80444	23.0826
0	16.22746	-4.37254	19.1191
0	14.80672	-2.99328	8.959751
0	18.40927	-3.29073	10.82891
1	16.92986	-5.77014	33.29447
0	17.566	-5.034	25.34113
0	21.326	-3.674	13.49829
0	18.74347	-1.15653	1.337558
0	16.84371	-3.95629	15.65225
1	17.24883	0.448834	0.201452
0	33.40369	11.50369	132.3349
0	13.24703	-14.253	203.1471
0	15.15667	-6.74333	45.47248
0	11.84995	-11.2501	126.5637
0	22.15192	-27.8481	775.5156
0	29.3579	-20.6421	426.0962
0	32.26844	-17.7316	314.4082
0	24.94092	-25.0591	627.9576
0	24.22082	-25.7792	664.566
0	4.023339	-9.77666	95.58309
0	-1.99976	-15.7998	249.6325
0	25.3473	10.3473	107.0667
0	18.02734	4.127345	17.03498
0	18.4338	5.133803	26.35593
0	17.17691	4.076907	16.62117
1	14.68416	4.484156	20.10766
0	22.52829	12.12829	147.0954
1	16.59708	5.697084	32.45676
0	11.80899	0.508991	0.259071
0	10.4653	-1.8347	3.366119
0	1.24617	-7.55383	57.06035
1	5.928366	-1.27163	1.617054
0	5.701505	-4.79849	23.02555
1	3.955681	-3.44432	11.86333
0	3.403159	-6.79684	46.19705
1	10.55089	-0.94911	0.900816
0	15.92811	0.828114	0.685772
0	16.54904	-6.65096	44.23531
0	6.998532	-2.70147	7.297928
0	18.7773	4.977297	24.77349

0	16.24659	3.546588	12.57829
1	17.0009	3.900904	15.21705
0	16.48704	3.987042	15.89651
0	14.21751	5.717514	32.68997
0	7.305515	2.305515	5.315401
0	8.31684	2.01684	4.067642
0	12.51465	6.914647	47.81234
0	17.03397	9.833971	96.70698
0	15.39828	3.298279	10.87865
0	13.42051	5.120506	26.21958
0	9.177564	0.677564	0.459094
0	12.91037	7.910365	62.57388
0	7.979253	-3.92075	15.37226
0	19.08479	-8.81521	77.70795
0	10.35436	-6.84564	46.86283
0	21.91155	-5.58845	31.23078
0	21.75874	6.758744	45.68062
0	19.26383	2.063825	4.259374
0	3.092625	-14.8074	219.2583
0	12.7594	-3.5406	12.53585
0	-0.70119	-7.70119	59.30837
0	11.80096	4.600962	21.16885
0	15.26488	7.764877	60.29331
1	9.760891	-0.63911	0.40846
0	14.73135	5.931353	35.18094
0	15.3453	6.945295	48.23713
1	18.75463	2.054634	4.221522
0	16.44917	2.249165	5.058744
0	17.9592	-2.8408	8.070122
0	17.56377	4.163775	17.33702
0	16.26873	4.568732	20.87331
0	12.88485	4.584854	21.02089
0	18.66401	8.46401	71.63947
0	18.97411	8.074113	65.19129
0	15.8407	4.840702	23.43239
0	15.47147	5.971471	35.65847
0	19.12132	4.621317	21.35657
0	20.58496	6.484962	42.05473
0	23.58879	7.488787	56.08193
1	16.3533	2.053299	4.216037
0	17.30123	5.60123	31.37378
1	14.32621	0.926214	0.857873
0	17.003	7.402997	54.80437
0	11.52152	3.321519	11.03249
0	7.72219	-0.67781	0.459426
0	12.49707	-0.30293	0.091766
0	11.72072	1.220716	1.490148
1	16.94737	-0.15263	0.023297
0	16.34276	1.542764	2.380121
0	15.45355	0.053548	0.002867

1	9.451807	-1.34819	1.817624
0	13.045	1.244997	1.550018
0	17.27766	2.377664	5.653284
0	18.09391	5.493911	30.18305
0	17.39942	3.299415	10.88614
0	16.9105	3.9105	15.29201
0	20.39505	6.99505	48.93072
0	18.71943	3.519435	12.38642
0	16.02647	-0.07353	0.005406
0	21.1545	3.354503	11.25269
0	16.31124	1.911244	3.652853
0	16.59977	2.499773	6.248865
0	13.50427	0.80427	0.646849
0	15.25755	1.757551	3.088984
0	15.81163	0.911633	0.831074
0	17.22857	-2.77143	7.680825
0	19.45508	3.05508	9.333511
0	19.66136	1.961358	3.846924
0	17.0584	-2.4416	5.961391
0	22.37093	2.170927	4.712925
1	18.22001	-3.17999	10.11236
0	17.15497	-2.74503	7.535213
0	16.2745	-2.7255	7.428372
1	14.37066	-4.72934	22.36663
0	15.45909	-3.64091	13.2562
0	16.67157	-3.42843	11.75413
0	16.72127	-3.17873	10.10432
1	21.69636	2.09636	4.394724
1	21.14665	-2.05335	4.216256
1	24.76009	-5.03991	25.40074
1	14.12609	0.326094	0.106337
0	15.65442	2.354423	5.543309
0	18.17779	1.477793	2.183873
0	10.91332	-1.08668	1.180876
0	18.48214	3.882144	15.07104
0	19.50271	-1.89729	3.599709
0	21.47398	-1.52602	2.32874
0	25.64134	1.941341	3.768806
0	26.3416	1.341598	1.799885
1	19.65101	-2.14899	4.618166
0	19.02054	-1.57946	2.494686
1	20.63732	-0.56268	0.316614
0	19.36457	0.264573	0.069999
0	19.70689	-0.89311	0.797646
0	13.97219	-1.22781	1.507524
0	11.8091	4.809103	23.12747
1	7.23023	-0.86977	0.7565
0	16.65556	3.055555	9.336417
0	20.69239	0.592393	0.350929
0	20.91492	-0.88508	0.783363

0	21.87572	-2.62428	6.88686
1	16.86596	-6.23404	38.86321
0	13.29643	-6.40357	41.00566
0	20.09407	1.794073	3.218696
0	21.52758	0.327583	0.107311
0	19.41079	1.910792	3.651125
0	20.46416	3.664159	13.42606
1	23.25762	0.85762	0.735513
1	22.09406	1.494064	2.232227
0	26.85436	2.954362	8.728257
0	27.85137	5.851365	34.23848
0	24.15757	5.157575	26.60058