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MILESTONE 1

1 Description

The following dataset is based on health insurance where a set of people with different age, height, gender, and region were asked to give the information about their healthcare expenses. This section details how these variables (age, gender, BMI, etc.) have affected their medical insurance charges.

Table 1: Project Data Column Definitions

Column Name	Column Description
Age	How people of different age are spending their money on medical expenses
Sex	How the gender of that person affects the health condition
BMI	How the body mass index is affecting the person's health condition
Children	How much money is spent on children's health care
Smoker	How smoking affects majorly the person's health condition
Region	The place that they are staying in affects the parameter
Charges	The overall costing

2 Raw Data Extract

The table below shows an extract of the raw data used for the analysis.

Table 2: Raw Sample Data Extract (First 150 Rows)

Age	Sex	BMI	Children	Smoker	Region	Charges
19	female	27.900	0	yes	southwest	16884.92
18	male	33.770	1	no	southeast	1725.55
28	male	33.000	3	no	southeast	4449.46
33	male	22.705	0	no	northwest	21984.47
32	male	28.880	0	no	northwest	3866.86
31	female	25.740	0	no	southeast	3756.62
46	female	33.440	1	no	southeast	8240.59
37	female	27.740	3	no	northwest	7281.51
37	male	29.830	2	no	northeast	6406.41
60	female	25.840	0	no	northwest	28923.14
25	male	26.220	0	no	northeast	2721.32
62	female	26.290	0	yes	southeast	27808.73
23	male	34.400	0	no	southwest	1826.84
56	female	39.820	0	no	southeast	11090.72
27	male	42.130	0	yes	southeast	39611.76
19	male	24.600	1	no	southwest	1837.24
52	female	30.780	1	no	northeast	10797.34
23	male	23.845	0	no	northeast	2395.17
56	male	40.300	0	no	southwest	10602.39
30	male	35.300	0	yes	southwest	36837.47
60	female	36.005	0	no	northeast	13228.85
30	female	32.400	1	no	southwest	4149.74
18	male	38.665	2	no	northeast	3393.36
34	female	31.920	1	yes	northeast	37701.88
37	male	31.350	2	no	northwest	6313.76
59	female	27.760	0	no	northeast	13429.04
63	female	23.085	0	no	northeast	14451.89
55	female	35.400	0	no	northeast	12947.82
63	female	38.000	0	no	southwest	10602.39
39	female	19.950	2	yes	northwest	1639.56
36	female	25.175	1	no	northwest	6079.67
19	female	28.600	5	no	southwest	4687.79
45	female	29.400	0	no	southeast	7408.27
49	male	34.100	1	no	southwest	8968.83
19	male	34.100	0	no	southwest	1837.24
62	female	32.965	3	no	northwest	15688.47
26	male	28.785	0	no	northeast	3267.12
35	male	36.670	1	yes	northeast	3971.04
60	male	39.920	0	yes	southeast	42983.45
24	female	26.600	0	no	northwest	2304.00
31	male	36.630	2	no	southeast	4571.41
37	female	35.150	3	no	northeast	7281.51
37	male	30.800	0	no	southwest	4463.20
39	male	25.745	2	no	northwest	7076.62
37	male	28.025	2	no	northeast	6272.48
39	female	23.670	2	no	northeast	7338.25
58	male	25.175	0	no	northeast	11981.14
56	male	35.800	1	no	southwest	10381.18
41	female	31.600	0	no	southwest	6185.77
53	male	32.740	2	no	southeast	10825.22
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Age	Sex	BMI	Children	Smoker	Region	Charges
45	male	27.800	0	yes	southwest	37829.72
42	male	24.605	2	yes	northeast	21259.38
24	female	27.720	0	no	southeast	2464.62
29	female	21.850	0	yes	northeast	16115.30
32	male	28.120	4	yes	northwest	21472.48
25	female	30.200	0	yes	southwest	33900.65
41	male	32.200	2	no	southwest	6875.96
42	male	26.315	1	no	northwest	6940.91
33	female	26.695	0	no	northwest	4571.41
34	male	42.900	1	no	southwest	4536.26
19	female	34.700	2	yes	southwest	36397.58
30	female	23.655	3	yes	northwest	18765.88
18	male	28.310	1	no	northeast	1968.84
50	female	27.835	2	no	northwest	10003.88
47	female	35.800	1	no	southwest	8964.06
25	male	33.660	4	no	southeast	4504.66
19	female	28.450	0	no	northwest	2338.06
52	female	24.860	0	no	northwest	27117.99
38	male	25.400	3	no	northeast	7031.80
52	female	21.400	1	no	southwest	11597.58
62	male	32.110	0	no	southeast	12981.35
44	female	30.810	0	no	southeast	7449.04
42	male	27.200	0	no	southwest	5655.89
52	male	34.485	3	no	northwest	11463.86
46	female	29.830	3	no	northwest	9549.57
41	female	40.280	0	no	southeast	6871.42
34	male	37.335	0	no	northwest	4875.38
30	female	21.900	0	no	southwest	3605.20
64	male	33.800	1	no	southwest	14692.20
46	male	30.495	3	no	northwest	9675.64
51	female	36.385	3	no	northwest	11393.21
35	male	35.860	2	no	southeast	5836.52
19	female	28.400	1	no	southwest	1856.92
52	female	34.800	2	no	southwest	10355.64
53	male	36.850	3	no	northwest	10604.57
63	male	36.765	0	no	northwest	13981.85
51	female	32.890	2	no	southeast	10309.29
60	female	33.070	0	no	northwest	13217.66
27	female	33.070	0	no	southwest	3465.35
58	male	32.800	0	no	southwest	11842.44
38	female	28.000	1	no	southwest	6067.13
42	female	24.385	0	no	northeast	6972.34
53	male	40.565	0	no	northeast	9713.87
28	female	20.800	1	no	southwest	5138.26
26	male	31.500	0	no	southwest	3218.44
46	female	23.700	2	no	southwest	8345.54
23	male	22.705	0	no	northwest	2155.67
50	female	38.270	0	no	southeast	10072.07
61	female	39.100	2	no	southwest	14235.09
37	male	34.100	4	yes	southeast	40182.25
53	female	22.880	1	no	southeast	1163.46
43	male	33.500	0	yes	southeast	3987.97
25	male	38.060	0	no	southeast	1821.76
37	male	34.100	4	yes	southeast	30344.75
55	female	30.685	0	no	northeast	11643.09
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Age	Sex	BMI	Children	Smoker	Region	Charges
58	male	33.630	0	no	northwest	11396.90
39	female	24.225	2	no	northwest	7077.98
51	male	34.100	0	no	southeast	9204.35
24	male	33.915	0	no	northwest	2360.57
34	male	23.370	2	no	northwest	5616.19
30	female	24.400	3	no	southwest	5428.72
30	female	23.590	2	no	southeast	4738.27
61	female	25.175	0	no	northeast	13831.12
47	female	36.670	1	no	northwest	8539.67
42	female	24.300	2	no	northwest	8017.06
54	male	29.300	0	no	southwest	10350.44
53	male	31.350	0	no	northeast	9736.56
34	male	26.030	0	no	northeast	4688.86
58	female	34.800	1	no	southwest	11944.59
43	female	41.060	0	no	southeast	6828.97
29	male	33.330	2	no	northeast	5415.66
60	male	25.300	1	no	southwest	13176.25
64	female	31.300	2	yes	southwest	47291.06
47	female	32.775	2	no	northwest	9639.42
46	male	42.790	1	yes	southeast	43373.23
46	female	23.000	3	no	southwest	8688.86
40	female	30.875	2	no	northwest	7254.67
43	male	41.800	1	no	southeast	6610.16
43	male	35.800	2	no	southeast	7627.07
20	male	30.685	0	no	northeast	2341.57
51	female	31.630	1	no	northwest	9917.34
48	female	32.270	0	no	northwest	8269.04
47	male	30.875	1	no	northwest	8556.91
37	male	27.550	2	no	northwest	6420.49
22	male	30.400	0	no	northwest	2775.19
60	male	39.050	2	no	southeast	12648.78
50	female	25.300	0	no	northwest	8482.26
48	male	36.630	3	no	southeast	10322.26
40	female	20.100	0	yes	northwest	15828.37
59	male	29.830	3	no	northeast	14001.03
40	male	39.800	1	no	southwest	5855.97
24	male	33.250	0	no	northeast	2296.65
60	male	30.500	1	no	southwest	12148.74
42	male	24.385	2	no	northeast	8049.43
52	female	26.400	0	no	southeast	9660.16
36	female	24.600	0	no	southwest	4883.98
56	female	25.745	2	no	northwest	12242.59
60	male	29.560	0	no	northeast	12629.46
55	female	27.370	0	no	northwest	10735.34
24	female	33.345	0	no	northeast	2835.86
40	female	29.800	0	no	southwest	5855.97
21	male	33.630	2	no	northwest	3579.83
21	female	25.800	0	no	southwest	2007.95
62	female	30.495	2	no	northwest	13616.36
33	female	36.290	3	no	southeast	5737.91
34	female	33.590	0	no	northwest	5393.36
36	female	20.355	0	yes	northwest	1656.49
46	male	30.655	2	no	northwest	9500.57
61	female	28.500	0	no	northwest	13429.04