

ASSIGNMENT 4

Buros Nicole

2022-04-21

Markdown Basics

Favorite Foods

- Tomatoes
- Olives
- Oysters

Images

Add a Quote

“Keep your face always toward the sunshine, and shadows will fall behind you.”
—Walt Whitman

Add an Equation

$$\sum_{n=1}^{10} n^2$$

Add a Footnote

1

This is a footnote

Add Citations

- R for Everyone (Lander 2014)
- Discovering Statistics Using R (Field, Miles, and Field 2012)

Inline Code

¹This is a footnote.



Figure 1: All Cases (Log Plot)

```

library(ggplot2)
setwd("C:/Users/njack/OneDrive/Documents/DSC 520/dsc520")
heights_df <- read.csv("data/r4ds/heights.csv")
covid_df <- read.csv("data/nytimes/covid-19-data/us-states.csv")
california_df <- covid_df[which(covid_df$state == "California"), ]
ny_df <- covid_df[which(covid_df$state == "New York"), ]
florida_df <- covid_df[which(covid_df$state == "Florida"), ]
heights_df

```

```

##      earn  height    sex ed age    race
## 1   50000 74.42444  male 16  45   white
## 2   60000 65.53754 female 16  58   white
## 3   30000 63.62920 female 16  29   white
## 4   50000 63.10856 female 16  91   other
## 5   51000 63.40248 female 17  39   white
## 6    9000 64.39951 female 15  26   white
## 7   29000 61.65633 female 12  49   white
## 8   32000 72.69854  male 17  46   white
## 9    2000 72.03947  male 15  21 hispanic
## 10  27000 72.23493  male 12  26   white
## 11    6530 69.51215  male 16  65   white
## 12  30000 68.03161  male 11  34   white
## 13  12000 67.55693  male 12  27   white
## 14  12000 65.43059 female 12  51   white
## 15  22000 65.66285 female 16  35   white
## 16  17000 67.75877  male 12  58   white
## 17  40000 68.35184 female 14  29   white
## 18  44000 69.60957  male 13  44   white
## 19   7000 64.18457 female 12  55   black
## 20  53000 73.07461  male 13  35   black
## 21   5000 62.37553 female 13  51   white
## 22  14000 63.02393 female 14  21   white
## 23   5500 67.22990  male 14  22   white
## 24  40000 65.55111 female 12  41   white
## 25  34000 72.07965  male 12  45   white
## 26  10000 63.09113 female 12  35   black
## 27  27000 64.32355 female 16  60   white
## 28  50000 71.64285  male 16  38   white
## 29  41000 76.79309  male 16  33   white
## 30  15000 63.89391 female 14  25   white
## 31  25000 63.80262 female 12  33   white
## 32  75000 71.59223  male 17  39   white
## 33  27000 67.52196  male 17  31   white
## 34  12000 64.39435 female 12  26   white
## 35   7500 61.17822 female 14  78   white
## 36  30000 66.98388 female 14  31   black
## 37  21000 65.31646 female 12  57   white
## 38  27000 63.57419 female 14  26   white
## 39   3000 66.61100 female 15  65   white
## 40  25000 64.91176 female 12  30   white
## 41  24000 64.78968 female 12  41   white
## 42  32000 66.93769 female 18  29   white
## 43  10000 68.17281 female 17  30   white

```

## 44	11000	60.45066	female	12	21	hispanic
## 45	18700	64.79325	female	13	32	white
## 46	20000	61.81492	female	12	29	white
## 47	3500	71.57215	male	10	18	white
## 48	13000	67.31441	male	8	56	black
## 49	25000	69.89987	male	12	65	white
## 50	21000	69.76170	male	17	41	white
## 51	34000	67.74647	female	17	49	white
## 52	6000	60.19022	female	12	65	white
## 53	17000	71.00650	male	12	28	white
## 54	35000	71.16680	male	12	32	white
## 55	4000	72.73563	male	13	18	white
## 56	14000	68.13822	female	14	55	white
## 57	10000	66.37981	female	12	57	white
## 58	25000	69.23278	male	16	29	white
## 59	16000	63.27394	female	14	27	white
## 60	16000	61.82776	male	14	28	hispanic
## 61	16500	64.22121	female	14	43	white
## 62	4000	63.84127	female	9	68	white
## 63	3840	66.97477	female	9	52	white
## 64	22000	71.45149	male	12	39	white
## 65	200	59.61265	female	16	53	white
## 66	26000	65.79939	female	16	27	white
## 67	2500	66.45804	female	15	21	white
## 68	17000	64.60288	female	14	39	white
## 69	8000	70.44048	female	13	22	white
## 70	12000	65.92281	female	13	68	white
## 71	10000	61.85683	female	12	47	white
## 72	10000	65.78444	female	15	67	white
## 73	15000	71.83128	male	12	39	white
## 74	2400	67.04533	female	8	39	hispanic
## 75	30000	68.30551	male	12	32	hispanic
## 76	30000	70.02546	male	12	33	white
## 77	10000	61.81039	female	12	38	white
## 78	5000	62.95107	female	13	26	white
## 79	12000	65.82114	female	13	63	white
## 80	20000	70.39755	female	10	61	white
## 81	20000	68.37778	female	12	36	white
## 82	20000	69.93270	male	14	23	white
## 83	1200	66.17181	female	12	20	white
## 84	700	68.45636	female	16	32	white
## 85	20000	69.90386	male	16	27	white
## 86	10000	61.14966	female	12	22	hispanic
## 87	30000	63.36335	female	12	73	white
## 88	40000	64.14708	female	14	56	white
## 89	25000	67.31839	male	12	89	white
## 90	10000	60.67494	female	17	79	white
## 91	60000	68.84090	female	18	63	white
## 92	18000	67.68273	female	12	66	white
## 93	16040	64.49677	female	12	33	white
## 94	15000	66.81240	female	14	30	black
## 95	10000	68.74644	male	17	23	white
## 96	33000	67.06765	female	13	43	white
## 97	18000	68.13799	female	12	30	white

## 98	15000	63.34290	female	12	37	white
## 99	21000	71.38667	male	12	22	white
## 100	21000	63.98834	female	17	43	black
## 101	37000	68.48639	male	11	37	white
## 102	38000	67.51614	female	17	44	white
## 103	17000	65.60084	female	14	43	hispanic
## 104	32000	76.80019	male	16	30	white
## 105	27500	67.10538	female	12	58	white
## 106	16500	62.15164	female	12	44	white
## 107	25000	66.86762	female	18	35	white
## 108	27000	61.04220	female	18	43	white
## 109	5000	64.12329	female	12	28	white
## 110	70000	61.54482	female	16	38	white
## 111	5000	62.55624	female	12	40	white
## 112	5000	68.16377	male	16	24	white
## 113	20000	63.65513	female	15	26	white
## 114	4000	72.37352	male	15	21	white
## 115	60000	64.14708	female	16	35	white
## 116	5000	61.32670	female	13	31	white
## 117	30000	74.36640	male	12	38	white
## 118	70000	70.21016	male	14	35	white
## 119	50000	71.10619	male	16	41	white
## 120	44000	62.59484	female	12	39	white
## 121	30000	64.05496	female	14	43	white
## 122	10000	61.57362	female	16	40	white
## 123	23000	70.48020	female	17	42	white
## 124	45000	71.18591	male	17	62	white
## 125	15000	71.43364	male	14	31	white
## 126	4000	70.22885	female	14	71	white
## 127	17000	67.28086	male	14	31	white
## 128	30000	63.75869	female	12	32	white
## 129	27500	67.08652	female	12	30	white
## 130	5688	61.67960	female	8	69	white
## 131	18000	62.28600	female	13	56	hispanic
## 132	43000	68.29248	male	13	44	black
## 133	32000	61.58948	female	14	44	black
## 134	10000	68.41774	female	18	56	black
## 135	60000	73.99126	male	13	45	white
## 136	21000	67.56107	female	12	50	other
## 137	2400	62.33793	female	16	22	white
## 138	1000	66.24001	female	15	28	white
## 139	27000	68.09847	male	12	27	white
## 140	6600	59.77087	female	14	28	hispanic
## 141	16000	68.06338	male	8	43	white
## 142	90000	71.68015	male	12	26	white
## 143	8000	66.35971	female	12	42	white
## 144	20000	68.35626	male	10	32	white
## 145	15000	68.45654	female	12	18	white
## 146	12000	68.78610	female	12	60	white
## 147	24000	64.10224	female	16	46	white
## 148	20000	65.11349	female	14	39	white
## 149	19000	60.64919	female	12	46	white
## 150	10000	72.12570	male	12	49	white
## 151	40000	65.51073	female	16	34	white

## 152	25000	67.93190	male	14	64	white
## 153	25000	70.44492	male	12	24	white
## 154	25000	71.36585	male	14	32	white
## 155	19000	71.12507	male	16	61	white
## 156	44000	68.16014	male	16	48	white
## 157	15000	60.11333	female	14	49	white
## 158	17000	62.78820	female	12	36	white
## 159	24000	68.07772	male	12	56	white
## 160	23000	64.05084	female	12	37	white
## 161	13000	69.71580	male	12	74	white
## 162	65000	68.22067	male	16	46	white
## 163	7000	60.88386	female	12	63	white
## 164	40000	68.40754	male	18	63	white
## 165	15000	66.00198	female	17	43	white
## 166	20000	69.79789	male	16	25	white
## 167	20000	71.01071	male	12	50	white
## 168	20000	65.14241	female	12	42	white
## 169	25000	65.96711	female	12	49	white
## 170	49000	69.99053	male	13	37	white
## 171	25000	61.87668	female	12	65	white
## 172	11000	66.10888	female	14	57	white
## 173	16000	61.05431	female	15	38	white
## 174	35000	71.56357	male	14	43	white
## 175	125000	74.34062	male	18	45	white
## 176	23000	66.57699	female	12	47	white
## 177	17000	66.11044	female	16	28	white
## 178	27000	61.96569	female	12	41	white
## 179	70000	71.74551	male	14	32	white
## 180	35000	64.56222	female	15	47	white
## 181	10000	60.19882	female	12	62	white
## 182	35000	61.91637	female	15	39	white
## 183	15000	66.41355	female	12	38	white
## 184	12000	63.69852	female	12	39	white
## 185	8000	71.29091	male	12	68	white
## 186	8000	65.25376	female	12	50	white
## 187	35000	73.00546	male	18	50	white
## 188	45000	68.64007	male	11	51	white
## 189	15000	64.38145	female	14	22	white
## 190	15000	61.06026	female	12	77	white
## 191	24000	66.78936	female	18	51	white
## 192	25000	61.82930	female	13	32	white
## 193	25000	62.60956	female	14	54	black
## 194	20000	67.36466	male	10	28	other
## 195	24000	68.01697	female	12	24	white
## 196	44000	72.06415	male	16	46	white
## 197	69000	70.10862	male	12	38	white
## 198	62000	69.85249	male	18	44	white
## 199	32000	67.45525	male	14	32	black
## 200	20000	63.45313	female	12	33	black
## 201	32000	66.29297	female	18	35	other
## 202	25000	65.83480	female	17	50	white
## 203	170000	71.01003	male	18	45	white
## 204	35000	66.61942	male	16	33	white
## 205	40000	75.56859	male	16	38	black

##	206	33000	68.95220	male	14	30	white
##	207	18000	65.34873	female	12	22	white
##	208	30000	61.75212	female	13	43	white
##	209	26000	61.76413	female	12	31	white
##	210	5000	62.41147	female	12	21	white
##	211	20000	61.90433	female	16	73	white
##	212	17000	60.63861	female	12	30	white
##	213	32000	64.82458	female	14	28	white
##	214	15000	72.27075	male	14	22	white
##	215	50000	71.67228	male	14	55	white
##	216	8000	63.77093	female	12	39	white
##	217	40000	70.78659	male	14	51	white
##	218	40000	72.40979	male	15	41	white
##	219	32750	66.08798	male	12	34	white
##	220	20000	64.99933	female	14	69	white
##	221	36000	64.52930	female	15	39	black
##	222	6000	61.74268	female	12	64	white
##	223	12000	65.84031	female	14	34	black
##	224	60000	67.39964	male	14	63	white
##	225	40000	64.02227	female	13	44	white
##	226	43000	63.22614	female	12	38	white
##	227	45000	67.49430	female	16	34	white
##	228	6000	68.00212	female	18	39	white
##	229	8000	63.85791	female	10	82	other
##	230	20000	64.39506	female	13	39	black
##	231	17000	66.43901	male	12	23	black
##	232	2000	64.76538	female	12	32	white
##	233	65000	64.53856	male	12	28	white
##	234	50000	71.58593	male	12	41	white
##	235	11000	68.34822	female	12	38	white
##	236	35000	74.43320	male	18	30	white
##	237	27000	63.21770	male	12	33	white
##	238	3500	64.31432	female	12	61	white
##	239	42000	68.15146	male	12	37	white
##	240	20000	67.49495	female	18	29	white
##	241	15000	67.31617	female	12	29	white
##	242	10000	72.98672	male	12	21	white
##	243	6000	70.49116	male	8	78	white
##	244	17000	64.88575	female	16	23	hispanic
##	245	35000	68.54049	male	16	65	hispanic
##	246	28000	76.68067	male	14	28	white
##	247	15000	67.69396	female	12	33	white
##	248	20000	61.97134	female	17	24	white
##	249	20000	64.21270	female	12	29	white
##	250	10500	67.22247	male	12	42	hispanic
##	251	13000	69.90214	male	16	22	white
##	252	10000	61.77745	female	12	52	white
##	253	3000	63.08135	female	12	37	white
##	254	24000	62.33487	female	14	29	white
##	255	17000	68.69584	female	13	35	white
##	256	11000	64.09801	female	12	48	white
##	257	32000	69.03400	female	14	40	white
##	258	17000	58.66032	female	15	26	white
##	259	3000	66.22625	female	12	35	other

##	260	2100	62.09126	female	12	21	black
##	261	3192	75.13845	male	11	34	black
##	262	17000	63.31428	female	17	26	white
##	263	30000	64.55410	female	13	28	white
##	264	15000	69.80036	male	12	32	white
##	265	24000	67.84325	female	16	42	white
##	266	10000	64.95007	female	14	67	white
##	267	50000	69.21831	male	8	53	white
##	268	50000	71.88612	male	16	53	white
##	269	20000	63.52426	female	17	49	white
##	270	30000	62.67856	female	18	54	hispanic
##	271	22000	73.47394	female	14	45	white
##	272	27000	75.09407	male	12	24	white
##	273	4000	64.77306	female	12	38	white
##	274	17500	66.25353	female	17	26	white
##	275	16500	66.39351	female	14	28	white
##	276	28000	64.00329	female	16	39	white
##	277	52000	65.57394	female	18	50	white
##	278	15000	64.27616	female	16	29	white
##	279	19000	62.64666	female	13	32	white
##	280	27000	72.55974	male	12	23	white
##	281	15000	71.78231	male	8	58	white
##	282	15000	71.50386	male	14	33	white
##	283	14500	64.15775	female	12	55	white
##	284	24000	64.22769	female	13	30	white
##	285	18000	67.79798	male	15	36	white
##	286	4000	62.27896	female	12	68	white
##	287	4000	68.50410	female	13	57	white
##	288	700	60.11268	female	12	36	white
##	289	24000	64.97933	female	12	91	white
##	290	27000	75.96951	male	12	39	white
##	291	12000	72.32790	female	12	35	white
##	292	22000	61.76565	female	18	47	white
##	293	30000	61.61640	female	13	36	white
##	294	35000	70.55408	male	12	61	white
##	295	20000	74.08120	male	12	42	white
##	296	32000	65.47242	female	16	32	white
##	297	6000	63.36531	female	12	31	other
##	298	12000	66.85000	female	12	39	white
##	299	10000	63.26609	female	12	31	white
##	300	1000	64.74551	female	12	18	white
##	301	12000	63.54206	female	15	71	white
##	302	16000	64.92311	female	12	36	white
##	303	25000	63.24201	female	16	33	white
##	304	25000	69.52456	female	12	27	white
##	305	32000	67.97809	male	12	30	white
##	306	35000	66.54874	male	14	43	white
##	307	6000	64.58870	female	12	28	white
##	308	80000	68.76669	male	14	44	white
##	309	20000	68.08389	female	14	25	white
##	310	1000	65.81591	female	17	38	white
##	311	28000	71.40238	male	13	38	hispanic
##	312	26000	63.76354	male	16	23	hispanic
##	313	27000	73.52538	male	12	24	white

##	314	18000	61.97999	female	13	41	white
##	315	2000	65.21052	female	12	59	white
##	316	20000	69.37547	male	12	66	white
##	317	6000	66.08656	female	16	48	white
##	318	25000	66.52544	male	11	63	white
##	319	12000	73.17216	male	12	29	white
##	320	12000	76.18488	male	12	57	white
##	321	30000	69.52563	male	14	76	white
##	322	4000	62.87571	female	15	22	black
##	323	26000	62.78291	female	13	37	black
##	324	23000	70.07592	male	12	35	black
##	325	21000	71.06308	male	12	33	white
##	326	25000	65.22338	female	12	62	white
##	327	18000	70.38000	male	16	75	white
##	328	4000	63.24725	female	13	44	white
##	329	23900	63.92087	female	12	22	white
##	330	35000	64.32948	female	18	40	white
##	331	26000	66.73039	male	14	30	white
##	332	25000	66.49049	male	16	36	white
##	333	23500	68.01891	female	13	27	white
##	334	12000	65.22522	female	12	22	white
##	335	15000	67.12425	female	12	20	white
##	336	3000	72.93588	male	17	23	white
##	337	6000	63.57961	female	12	67	white
##	338	14000	71.44772	male	12	69	white
##	339	15000	63.28314	female	16	31	white
##	340	175000	70.58955	male	16	48	white
##	341	1000	73.37096	male	18	25	white
##	342	10000	64.68889	female	14	63	white
##	343	45000	65.92309	male	13	82	white
##	344	15000	65.84832	female	12	81	white
##	345	20000	59.20287	female	13	41	white
##	346	35000	69.99012	male	16	30	white
##	347	40000	71.66564	male	16	28	white
##	348	35000	64.20183	female	12	72	white
##	349	50000	66.06455	female	16	54	white
##	350	100000	69.66688	male	18	57	white
##	351	35000	68.56316	male	13	28	white
##	352	24000	67.72061	female	12	35	white
##	353	35000	73.83110	male	17	43	white
##	354	38000	72.53878	male	16	74	white
##	355	30000	67.24277	male	12	52	white
##	356	5000	63.98628	female	12	39	hispanic
##	357	148000	66.74020	male	18	38	white
##	358	30000	69.77329	male	12	32	white
##	359	6500	63.75686	female	15	31	white
##	360	3000	61.55948	female	16	37	white
##	361	23000	69.29717	male	18	69	white
##	362	40000	68.47821	male	17	41	white
##	363	30000	72.11037	male	14	39	white
##	364	14000	63.10641	female	12	37	white
##	365	15000	68.71668	female	12	34	white
##	366	26000	64.00637	female	18	36	white
##	367	8000	71.00964	female	12	25	white

## 368	24000	63.84402	female	16	27	black
## 369	5124	66.10071	male	8	67	white
## 370	10000	60.97499	female	15	25	white
## 371	12000	67.75510	female	16	32	white
## 372	50000	68.45831	male	17	34	white
## 373	23000	63.80380	female	13	26	white
## 374	40000	65.70889	male	14	34	black
## 375	6000	61.93158	female	13	26	black
## 376	5000	65.32257	female	16	30	black
## 377	110000	65.96504	male	18	37	white
## 378	41000	72.04236	male	13	32	hispanic
## 379	23000	62.57023	female	13	78	white
## 380	21000	70.43141	male	12	23	white
## 381	4000	62.32131	female	12	29	white
## 382	25000	70.70824	male	12	36	white
## 383	30000	70.27755	male	18	46	white
## 384	14000	63.87068	female	11	51	white
## 385	6000	63.47754	female	12	35	white
## 386	14000	64.59348	female	12	46	white
## 387	43000	70.51344	male	12	27	white
## 388	25000	61.70052	female	15	33	white
## 389	40000	72.55343	male	12	66	white
## 390	65000	67.58731	male	17	40	white
## 391	16000	76.15187	male	15	32	white
## 392	8000	65.57775	female	12	71	white
## 393	20000	64.22912	female	15	39	white
## 394	14000	60.31368	female	14	72	white
## 395	45000	68.13747	male	12	74	white
## 396	8000	60.94487	female	11	72	white
## 397	12000	66.02238	male	12	28	white
## 398	8000	62.88533	female	14	31	white
## 399	16000	62.67241	female	15	32	white
## 400	6000	73.68754	male	15	73	white
## 401	19000	70.10196	male	12	32	white
## 402	21000	68.30324	female	13	39	white
## 403	43000	69.52018	female	18	46	white
## 404	35000	68.71778	male	15	21	white
## 405	8000	70.49465	male	10	75	white
## 406	21000	62.77760	female	14	41	white
## 407	5800	65.12696	female	12	30	white
## 408	17000	69.34231	male	12	46	white
## 409	24000	67.54425	male	14	49	white
## 410	5000	62.34081	female	11	71	white
## 411	11000	66.17610	female	12	23	white
## 412	10000	65.45162	male	13	27	white
## 413	40000	69.78536	male	14	36	white
## 414	40000	70.46079	male	12	47	white
## 415	24000	65.75426	female	14	29	black
## 416	24000	68.49064	male	16	26	white
## 417	20000	68.13681	male	16	33	white
## 418	60000	69.74409	male	18	50	white
## 419	11000	64.55673	female	13	47	white
## 420	5000	64.39143	female	15	40	white
## 421	27000	65.29906	female	16	30	white

## 422	89000	76.53780	male	16	41	white
## 423	40000	70.02428	male	14	28	white
## 424	15000	64.45588	female	16	26	white
## 425	1000	64.17829	female	14	20	white
## 426	22000	64.37256	female	12	60	white
## 427	12000	63.68146	female	8	48	white
## 428	22000	62.56621	female	16	28	white
## 429	40000	57.50322	female	12	56	black
## 430	40000	62.02662	female	16	44	white
## 431	35000	64.45005	female	14	53	hispanic
## 432	7000	63.63646	female	12	28	white
## 433	14000	62.23202	female	12	37	white
## 434	15000	64.01304	female	12	56	white
## 435	6000	65.88741	female	13	34	white
## 436	11000	69.29444	female	12	41	black
## 437	10000	64.34100	female	13	31	white
## 438	20000	70.70352	male	14	41	white
## 439	7000	62.08915	female	12	73	white
## 440	38000	68.29980	male	9	46	white
## 441	29000	67.80439	male	9	58	white
## 442	20000	61.77627	female	10	44	white
## 443	8000	62.51287	female	12	57	white
## 444	36000	68.73132	male	16	51	white
## 445	1500	67.04634	female	12	44	white
## 446	42000	64.29710	female	18	29	white
## 447	25000	70.38619	male	12	22	white
## 448	13000	68.95557	male	10	20	white
## 449	30000	69.24640	male	11	51	black
## 450	7000	68.57202	male	12	23	white
## 451	31000	59.84566	female	12	48	black
## 452	15000	66.42150	female	12	42	black
## 453	50000	66.63238	male	16	49	white
## 454	5000	66.24960	male	15	20	white
## 455	600	70.23859	female	12	18	black
## 456	14000	64.48861	female	8	51	black
## 457	40000	59.97167	female	18	35	other
## 458	24000	68.26500	male	18	36	white
## 459	22000	72.73850	male	12	24	black
## 460	20000	71.86160	male	8	36	white
## 461	20112	63.75193	female	12	38	white
## 462	12000	67.34015	male	13	67	white
## 463	41000	67.24025	female	13	40	white
## 464	13000	71.46243	male	9	50	black
## 465	60000	72.73708	male	16	31	white
## 466	24000	70.28583	male	16	25	white
## 467	38000	70.06343	male	16	36	white
## 468	3000	71.13169	female	14	27	white
## 469	13000	65.96480	female	12	30	white
## 470	5000	74.80273	male	12	21	white
## 471	20000	60.26324	female	14	37	white
## 472	22000	72.45994	male	12	28	white
## 473	28000	74.78834	male	9	55	black
## 474	22000	59.80482	female	12	41	white
## 475	30000	73.43138	male	12	44	black

## 476	30000	64.59752	female	12	32	black
## 477	30000	67.11170	male	16	31	white
## 478	32000	61.05400	female	12	69	white
## 479	26000	69.28213	female	17	43	white
## 480	22000	64.41598	female	14	34	white
## 481	25000	70.34138	male	12	33	white
## 482	11000	67.63296	female	10	24	white
## 483	13000	62.18865	female	12	53	white
## 484	10000	63.78785	female	15	42	white
## 485	12000	67.58146	female	12	45	white
## 486	7000	63.51531	female	11	64	white
## 487	57000	72.64024	male	14	37	white
## 488	36000	72.82462	male	16	37	white
## 489	29000	69.40743	male	14	29	hispanic
## 490	8000	68.29110	female	13	19	white
## 491	3000	70.64524	male	11	18	black
## 492	20000	66.13450	female	16	41	white
## 493	33000	66.37326	male	12	57	white
## 494	15000	68.30015	female	12	68	hispanic
## 495	16000	70.29628	male	12	33	white
## 496	5000	61.82134	female	12	78	white
## 497	8000	65.75500	female	14	43	white
## 498	32000	63.02599	female	16	34	black
## 499	14500	74.51779	male	12	24	white
## 500	13000	66.59654	female	12	29	white
## 501	7000	62.63598	female	9	25	white
## 502	50000	64.71526	female	18	65	black
## 503	12000	69.20172	female	12	35	black
## 504	19000	71.47208	male	14	61	white
## 505	9000	61.90178	female	12	55	white
## 506	20000	64.74551	female	12	35	black
## 507	55000	71.71052	male	18	35	hispanic
## 508	10000	64.90903	female	12	40	white
## 509	13000	63.15415	female	12	19	white
## 510	20000	63.97677	female	13	31	white
## 511	30000	71.58899	male	12	26	white
## 512	12000	63.59626	female	12	34	white
## 513	26000	70.06810	female	13	33	white
## 514	12500	64.97475	female	12	27	white
## 515	8000	64.31371	female	12	29	white
## 516	15000	64.20908	female	16	32	hispanic
## 517	65000	66.97400	male	14	25	white
## 518	25000	73.18381	male	10	21	white
## 519	8000	72.53887	male	14	21	hispanic
## 520	15000	64.50500	male	14	21	other
## 521	12000	63.93105	female	16	40	white
## 522	35000	67.08204	female	13	37	black
## 523	40000	66.61123	male	16	31	white
## 524	29000	73.89562	male	12	22	white
## 525	15000	63.44261	female	13	31	white
## 526	20000	73.68861	male	12	36	white
## 527	3000	73.91113	male	6	62	black
## 528	1000	63.08713	female	16	19	black
## 529	8000	62.03633	female	11	23	black

## 530	5000	62.45248	female	12	18	white
## 531	25000	67.03790	female	16	27	white
## 532	20000	68.59331	male	12	57	white
## 533	30000	72.67425	male	12	34	white
## 534	12000	62.87129	female	12	35	white
## 535	10000	67.22335	female	14	32	white
## 536	16000	69.39067	male	12	19	white
## 537	45000	71.41330	male	12	29	white
## 538	40000	72.08596	male	14	54	white
## 539	25000	70.21479	male	14	81	white
## 540	19000	64.30326	female	14	52	white
## 541	17600	64.13060	female	16	30	white
## 542	7000	67.91112	male	12	67	white
## 543	30000	74.34589	male	12	32	white
## 544	18000	61.81896	female	11	47	white
## 545	25000	65.12869	female	16	47	white
## 546	6000	59.96125	female	5	62	white
## 547	70000	69.38679	male	18	42	white
## 548	15000	60.75150	female	16	34	other
## 549	25000	64.93233	female	17	33	white
## 550	35000	66.20340	female	16	28	white
## 551	18000	69.91583	male	16	24	white
## 552	28000	71.56571	male	15	30	black
## 553	15000	63.90538	female	11	21	hispanic
## 554	22000	71.33306	male	14	28	hispanic
## 555	35000	73.39039	male	12	30	white
## 556	18000	64.03798	female	15	46	black
## 557	35000	67.84231	male	14	37	white
## 558	16400	64.25282	female	12	21	black
## 559	22000	65.64795	male	16	37	black
## 560	30000	66.54677	female	16	58	white
## 561	17000	64.12242	female	12	27	hispanic
## 562	25000	64.11060	female	14	36	black
## 563	10000	62.21866	female	12	51	white
## 564	40000	68.94602	male	12	37	white
## 565	12500	63.24088	female	12	63	white
## 566	35000	72.39141	male	15	45	white
## 567	105000	74.58005	male	12	49	white
## 568	100000	69.52920	male	18	40	white
## 569	21000	69.33476	male	12	51	white
## 570	10000	64.01763	female	14	56	white
## 571	33000	71.93661	male	12	26	white
## 572	26000	69.46231	male	18	25	white
## 573	60000	63.07907	female	10	78	white
## 574	18000	71.11434	male	16	45	white
## 575	15000	59.34178	female	8	61	white
## 576	5000	68.31486	male	13	20	white
## 577	60000	77.05128	male	17	42	white
## 578	12000	68.41968	female	14	69	white
## 579	28000	69.67201	male	18	38	black
## 580	42000	69.28192	male	18	43	white
## 581	2000	62.73899	female	12	33	white
## 582	20000	72.79469	male	18	33	black
## 583	28000	66.12674	male	15	40	other

## 584	10000	72.19215	male	17	62	black
## 585	31000	72.22432	male	12	31	black
## 586	17000	68.98432	female	13	37	black
## 587	16000	67.17655	female	12	39	white
## 588	35000	65.67095	female	15	38	white
## 589	3000	67.34625	female	12	26	white
## 590	16000	67.53278	female	18	39	white
## 591	35000	64.57749	female	15	42	black
## 592	27000	61.58435	female	17	33	black
## 593	25000	69.38512	male	17	29	white
## 594	40000	69.60982	male	16	41	white
## 595	45000	66.07183	female	16	43	white
## 596	14000	65.85618	male	12	23	white
## 597	25000	66.39505	female	14	37	white
## 598	40000	71.84415	male	12	42	white
## 599	34000	68.89893	male	12	35	white
## 600	40000	65.75578	male	12	34	white
## 601	35000	69.44946	male	14	28	white
## 602	12000	60.15630	female	12	51	hispanic
## 603	30000	64.56873	female	17	43	white
## 604	23000	61.58792	female	12	40	white
## 605	2000	67.07979	female	12	30	white
## 606	20000	67.21214	male	14	25	white
## 607	10000	67.83994	female	9	62	black
## 608	60000	65.61768	female	16	43	black
## 609	12000	74.24347	male	16	41	black
## 610	25000	65.47813	female	18	61	white
## 611	22000	62.88988	female	14	73	black
## 612	8000	68.10779	male	17	25	white
## 613	2000	66.39806	female	16	21	white
## 614	18600	65.49678	female	16	26	white
## 615	20000	61.54580	female	14	20	white
## 616	100000	72.62916	male	18	37	white
## 617	50000	61.89058	female	15	40	white
## 618	27000	69.81381	male	12	42	white
## 619	1000	58.27594	female	12	58	black
## 620	18000	68.37147	male	12	20	white
## 621	17000	67.35070	female	14	23	white
## 622	10000	63.83751	female	12	74	white
## 623	14000	70.36153	male	14	35	white
## 624	7200	72.49588	male	14	66	white
## 625	33000	63.19196	female	17	39	white
## 626	23000	66.26428	male	12	34	white
## 627	10000	64.88321	female	12	41	white
## 628	22000	60.58631	male	12	24	white
## 629	13000	60.81704	female	12	19	hispanic
## 630	33000	67.20153	female	12	31	white
## 631	36000	73.11522	male	12	36	white
## 632	10000	70.52104	female	14	32	black
## 633	6000	64.49766	female	12	60	white
## 634	12000	66.64803	female	12	43	white
## 635	10000	62.07149	female	11	47	white
## 636	21000	67.40431	female	12	45	white
## 637	26000	68.69590	male	12	32	white

## 638	22000	66.06555	female	12	50	black
## 639	23000	66.18482	female	15	54	black
## 640	20000	66.44449	male	15	24	white
## 641	10000	65.50939	female	13	38	white
## 642	15000	64.06472	female	12	71	white
## 643	7000	72.11810	male	14	24	black
## 644	15000	64.13901	female	12	38	white
## 645	26000	64.75170	female	16	34	white
## 646	10000	72.20326	male	11	31	white
## 647	3000	71.00609	male	14	20	white
## 648	27000	64.19495	female	17	41	hispanic
## 649	28000	63.65898	female	17	25	white
## 650	15000	66.86213	female	12	27	white
## 651	55000	75.18170	male	18	30	white
## 652	20000	65.86811	female	17	26	hispanic
## 653	8500	67.14265	female	12	44	white
## 654	30000	70.58245	male	16	30	white
## 655	20000	68.35426	female	12	31	white
## 656	22000	70.44056	male	6	75	white
## 657	25000	66.50504	male	16	26	white
## 658	3000	70.50765	male	8	22	white
## 659	16000	62.66823	female	12	49	white
## 660	10000	61.04436	female	12	39	black
## 661	15000	64.86502	female	12	28	black
## 662	28000	67.24574	male	12	46	white
## 663	31500	64.93867	male	14	35	white
## 664	95000	65.68957	male	18	52	white
## 665	38000	66.51239	male	12	40	white
## 666	30000	74.21724	male	12	41	white
## 667	35900	73.80273	male	16	42	white
## 668	12000	66.28297	female	13	22	white
## 669	10000	68.93080	female	16	25	white
## 670	45000	66.09704	female	18	44	white
## 671	40000	74.36389	male	16	56	white
## 672	21500	72.37949	male	12	27	white
## 673	14000	65.61603	male	12	62	white
## 674	38000	66.52629	male	17	54	other
## 675	1000	64.73345	female	12	18	white
## 676	14000	66.37034	male	12	73	white
## 677	15000	64.52285	female	12	31	white
## 678	24000	67.82326	female	13	42	white
## 679	4500	64.15133	female	16	23	white
## 680	18000	64.35311	female	16	63	white
## 681	14000	63.33757	female	12	20	white
## 682	10000	68.97627	female	12	28	white
## 683	9500	67.44008	female	12	32	white
## 684	11000	62.95530	female	15	66	white
## 685	17000	66.85605	male	12	67	white
## 686	6000	59.82544	female	13	28	white
## 687	2500	61.85860	female	11	58	white
## 688	40000	72.44135	male	16	41	white
## 689	25000	66.60469	male	16	39	white
## 690	28000	66.39671	female	15	60	black
## 691	33000	66.38942	female	12	45	black

## 692	4000	59.57195	female	8	64	white
## 693	4100	65.33567	male	16	30	white
## 694	25000	68.58468	female	12	82	white
## 695	32000	71.66115	male	12	28	white
## 696	13000	63.93733	female	8	58	white
## 697	8000	64.48913	male	8	27	hispanic
## 698	17000	64.24300	female	12	38	white
## 699	15000	66.79827	female	12	77	white
## 700	18000	65.99471	male	13	32	white
## 701	12000	73.07390	male	12	24	white
## 702	7000	73.82733	male	7	49	white
## 703	1200	64.83539	female	14	22	white
## 704	14000	63.11851	male	12	21	white
## 705	17000	63.43203	female	12	40	white
## 706	30000	66.34629	male	12	42	white
## 707	25000	69.91938	male	12	53	white
## 708	22000	65.86858	female	12	33	hispanic
## 709	15000	63.44294	female	12	21	white
## 710	27000	73.07807	male	12	91	white
## 711	20000	63.01705	female	16	26	white
## 712	9000	68.92440	female	11	34	white
## 713	17000	73.14869	male	12	30	white
## 714	1800	67.79395	female	12	46	white
## 715	18000	63.62625	female	12	46	white
## 716	25000	62.57749	female	18	42	white
## 717	20000	70.10582	male	16	41	black
## 718	75000	64.31609	female	15	40	white
## 719	3500	65.75935	female	12	40	white
## 720	36000	60.85753	female	12	71	white
## 721	30000	72.05727	male	12	25	white
## 722	25000	64.55149	female	13	78	white
## 723	1000	64.24739	female	14	26	white
## 724	60000	68.02362	male	12	66	white
## 725	35000	73.89188	male	13	76	white
## 726	9000	66.63394	male	13	33	white
## 727	35000	69.86527	male	9	84	white
## 728	11000	66.11651	female	10	58	white
## 729	12000	71.34630	male	12	52	white
## 730	30000	70.88307	male	12	43	white
## 731	19000	71.47186	male	7	57	black
## 732	9000	74.41812	male	9	61	white
## 733	30000	74.69529	male	16	29	white
## 734	9000	71.92581	male	12	32	white
## 735	15000	65.85539	female	16	30	hispanic
## 736	8000	64.52972	female	12	31	black
## 737	10000	66.49255	female	10	75	white
## 738	33000	71.70659	male	12	37	white
## 739	12000	60.09432	female	12	28	hispanic
## 740	18000	63.97287	female	15	37	white
## 741	30000	64.81971	female	13	61	white
## 742	12500	64.71230	female	12	32	white
## 743	10000	61.97447	female	12	36	black
## 744	8500	68.29414	male	13	71	black
## 745	21000	73.48687	male	14	46	black

## 746	21000	63.93752	female	12	77	white
## 747	21000	68.21020	female	17	25	white
## 748	5000	66.10164	female	12	52	white
## 749	22000	71.22581	female	17	36	white
## 750	30000	72.70185	male	14	26	white
## 751	123000	61.42908	female	14	58	white
## 752	8000	63.24714	female	9	45	white
## 753	2000	64.36810	female	9	25	white
## 754	7600	67.04141	female	6	62	white
## 755	10000	63.15251	female	12	25	white
## 756	35000	72.70741	male	12	48	white
## 757	15000	66.07587	female	16	57	white
## 758	4000	69.75553	female	12	22	white
## 759	16000	67.89105	male	8	24	white
## 760	200	66.86191	female	12	33	white
## 761	23000	74.10505	male	16	25	white
## 762	16000	63.60244	female	16	27	white
## 763	6000	60.20715	female	12	49	white
## 764	600	59.45893	female	9	46	white
## 765	28000	74.59877	male	16	34	other
## 766	4000	65.95294	female	8	66	white
## 767	15000	64.16955	male	12	35	white
## 768	15000	71.26410	male	12	25	white
## 769	25000	63.12568	female	12	30	white
## 770	15000	67.16629	female	12	26	white
## 771	40000	68.58090	male	11	44	white
## 772	30000	70.34383	male	11	51	white
## 773	5000	66.38894	female	12	29	white
## 774	35000	73.58718	male	14	34	white
## 775	16000	64.78882	female	14	31	white
## 776	28000	63.53549	female	16	40	white
## 777	20000	67.63722	male	15	42	white
## 778	21000	65.60212	male	13	30	white
## 779	17000	68.83580	male	12	42	black
## 780	24000	59.93190	female	13	50	white
## 781	25000	60.79660	female	12	75	white
## 782	40000	75.03414	male	12	46	white
## 783	8000	63.93496	female	13	19	white
## 784	19000	62.74962	female	15	45	hispanic
## 785	45000	67.22273	female	16	69	white
## 786	5000	64.10166	male	17	33	black
## 787	24000	63.43396	female	14	40	black
## 788	5000	67.07147	female	14	19	white
## 789	33000	65.87795	male	16	34	white
## 790	24000	65.22229	female	14	24	white
## 791	6000	62.64251	female	13	23	white
## 792	90000	66.43623	female	14	55	white
## 793	57000	64.09800	female	18	47	white
## 794	13800	70.74232	male	14	54	white
## 795	30000	71.24931	male	18	37	white
## 796	15000	71.70961	male	12	40	white
## 797	15000	59.66460	female	14	75	white
## 798	31000	69.78665	male	12	29	white
## 799	33000	73.99725	male	17	40	white

##	800	30000	67.55916	male	18	61	white
##	801	12000	74.33899	male	12	38	white
##	802	5000	75.00721	male	12	22	white
##	803	21000	68.16158	male	12	59	white
##	804	28000	62.58655	female	18	46	white
##	805	12000	72.03875	male	12	31	white
##	806	19000	64.49414	female	12	46	white
##	807	6000	62.60842	female	14	35	white
##	808	5300	65.90543	female	13	60	white
##	809	15000	60.87601	female	13	28	white
##	810	17000	73.12189	male	12	46	white
##	811	4700	65.54228	female	12	78	black
##	812	9500	62.07427	female	12	65	white
##	813	1700	64.53591	male	12	22	white
##	814	5400	62.35350	female	12	31	white
##	815	10000	68.11736	male	12	31	white
##	816	25000	58.88042	female	15	83	white
##	817	35000	68.42126	female	16	43	white
##	818	28000	62.78644	female	18	44	white
##	819	42000	62.76001	female	12	40	white
##	820	45000	67.82704	male	12	58	white
##	821	55000	64.15770	female	12	51	white
##	822	36000	70.10556	female	16	30	white
##	823	25000	70.27167	male	10	31	white
##	824	19000	72.18899	male	12	28	white
##	825	38000	68.90136	male	11	50	white
##	826	15000	63.07259	female	14	37	white
##	827	4500	57.97290	female	5	85	white
##	828	96000	63.11989	female	14	27	white
##	829	11000	62.70556	female	12	47	white
##	830	9000	72.57431	male	15	34	white
##	831	5000	69.41363	female	14	24	white
##	832	50000	69.82504	male	12	51	white
##	833	6000	64.89705	female	13	44	white
##	834	100000	71.51572	male	13	22	white
##	835	16500	61.91616	female	13	46	white
##	836	32000	71.60782	male	14	40	white
##	837	30000	72.75964	male	18	41	white
##	838	10000	67.91167	female	16	42	white
##	839	15000	66.13226	female	12	19	white
##	840	6500	59.90598	female	8	83	white
##	841	26000	60.30743	female	18	63	white
##	842	17000	64.87640	female	12	59	white
##	843	22000	62.80542	female	18	59	other
##	844	10000	63.93523	female	12	41	white
##	845	50000	70.50475	male	14	58	white
##	846	20000	67.17893	male	12	35	white
##	847	400	62.90287	female	12	31	white
##	848	16000	65.08065	female	14	59	white
##	849	10000	66.42656	female	12	66	white
##	850	14000	62.94001	female	13	58	white
##	851	5000	65.19972	female	15	20	white
##	852	40000	73.78851	male	16	34	white
##	853	5000	67.18860	female	13	55	white

## 854	25000	67.54551	female	17	47	white
## 855	12000	65.25626	female	12	51	white
## 856	58000	63.70218	female	16	34	white
## 857	18000	67.83460	female	16	26	white
## 858	1000	65.48821	male	12	18	white
## 859	21000	71.76438	male	17	47	white
## 860	11000	65.69804	male	12	62	black
## 861	13000	63.66103	female	12	36	white
## 862	20000	59.63484	female	16	88	other
## 863	25000	71.69116	male	12	35	black
## 864	600	63.51513	female	12	43	white
## 865	25000	67.28185	male	14	26	black
## 866	36000	67.84666	male	12	28	white
## 867	15000	64.05579	female	13	33	other
## 868	3500	65.62335	female	12	51	white
## 869	19005	64.61287	female	16	34	white
## 870	62000	70.36270	male	14	54	white
## 871	25000	70.13582	male	12	42	white
## 872	50000	66.03882	male	12	52	white
## 873	40000	65.66768	male	12	61	white
## 874	26000	73.68208	male	18	26	white
## 875	22000	62.23430	female	12	48	white
## 876	21000	65.58047	female	17	39	white
## 877	6108	62.34291	female	12	65	white
## 878	30000	64.71665	female	18	64	black
## 879	6000	63.41644	female	12	78	white
## 880	27000	70.93384	male	16	29	white
## 881	4000	65.78463	female	16	42	white
## 882	4416	61.52156	female	6	72	other
## 883	5000	63.13920	female	10	87	white
## 884	45000	66.56994	male	18	40	white
## 885	18000	60.76265	female	14	45	white
## 886	6000	66.40241	female	15	22	white
## 887	14000	72.40009	male	12	24	white
## 888	35000	69.32629	female	14	24	white
## 889	15000	64.14805	female	16	29	white
## 890	12000	62.50258	female	12	29	black
## 891	1000	59.63618	female	12	47	white
## 892	32000	69.84609	male	15	33	black
## 893	1500	72.79965	male	12	19	white
## 894	3000	64.87412	female	16	23	black
## 895	35000	64.27539	female	12	42	white
## 896	70000	71.60516	male	15	48	white
## 897	21000	67.13204	female	16	28	white
## 898	50000	69.10554	male	11	18	white
## 899	15000	70.90079	male	9	21	white
## 900	9000	65.99266	female	8	35	black
## 901	10000	63.21551	female	14	25	black
## 902	30000	71.37289	male	12	47	white
## 903	16000	72.07876	male	14	21	white
## 904	20000	67.93927	male	12	51	white
## 905	100000	71.94711	male	17	54	white
## 906	10000	65.66242	female	12	43	white
## 907	35000	66.47077	male	14	63	white

## 908	7000	65.42764	female	16	31	white
## 909	8000	71.35958	male	14	27	black
## 910	11000	73.69928	male	10	50	white
## 911	25000	70.20955	male	9	47	white
## 912	25000	64.33590	female	14	45	white
## 913	30000	69.23577	male	14	48	white
## 914	48000	63.16803	female	18	34	white
## 915	17000	67.97178	female	12	46	white
## 916	26000	72.63630	male	16	24	white
## 917	10000	62.64564	female	12	61	white
## 918	60000	71.15194	male	18	53	white
## 919	22000	64.94458	female	18	29	white
## 920	6200	64.22719	female	13	83	white
## 921	24000	64.74690	female	16	32	white
## 922	20000	70.69914	male	14	40	white
## 923	7000	69.61523	female	14	30	white
## 924	30000	67.70270	female	16	48	black
## 925	23000	66.09329	female	18	28	white
## 926	20000	64.39957	female	12	40	white
## 927	3000	65.88019	female	16	29	white
## 928	30000	69.73543	male	16	41	white
## 929	12000	63.79241	female	14	23	white
## 930	40000	70.60792	male	12	38	white
## 931	15000	63.83650	female	14	23	white
## 932	36000	63.41338	female	16	45	white
## 933	10000	66.23722	female	12	53	white
## 934	13000	68.38071	female	14	48	white
## 935	10000	61.52425	female	12	27	black
## 936	30000	68.53243	male	12	37	black
## 937	23000	64.46456	male	13	32	white
## 938	20000	69.60981	male	17	68	white
## 939	19000	65.37075	female	13	82	white
## 940	20000	60.75108	male	11	66	black
## 941	28000	63.99366	male	14	63	black
## 942	13000	64.58116	female	10	80	white
## 943	12000	64.13895	male	12	75	white
## 944	20000	69.30129	male	11	23	white
## 945	25000	73.63658	male	12	30	white
## 946	25000	68.19243	female	13	52	white
## 947	18000	66.59646	female	16	40	white
## 948	6000	61.80107	female	10	68	white
## 949	16000	72.24264	male	13	23	white
## 950	45000	73.46034	male	16	38	white
## 951	25000	69.87076	male	14	69	white
## 952	12000	63.51997	female	14	38	white
## 953	2000	68.21243	female	12	18	white
## 954	10000	62.91207	female	12	18	white
## 955	14000	70.72026	male	12	36	white
## 956	15000	63.74181	female	12	31	white
## 957	10000	60.36111	female	12	39	white
## 958	1200	65.76632	female	4	64	white
## 959	15000	58.92336	female	14	62	white
## 960	10000	63.10044	female	13	64	white
## 961	2000	66.20177	male	12	18	white

## 962	4000	65.44585	female	13	33	white
## 963	10000	64.39271	female	14	32	white
## 964	1500	65.77418	female	12	23	white
## 965	18000	65.50058	male	17	26	hispanic
## 966	4000	72.89740	male	15	24	white
## 967	28000	72.44737	male	16	26	white
## 968	10000	74.32628	female	14	22	white
## 969	3000	64.65599	female	16	22	white
## 970	12000	70.61207	male	12	21	white
## 971	19000	68.07568	female	13	45	white
## 972	36000	70.49066	male	16	39	white
## 973	7000	64.21713	female	16	59	white
## 974	35000	58.72468	female	11	34	white
## 975	40000	67.90288	male	18	43	white
## 976	15000	67.93034	male	14	25	white
## 977	8000	68.82437	female	13	43	white
## 978	25000	69.43574	female	14	55	white
## 979	28000	75.26532	male	18	38	white
## 980	22000	69.13342	male	14	35	white
## 981	21500	72.04506	male	13	24	black
## 982	3000	68.33676	female	12	23	white
## 983	23000	71.53957	male	13	28	white
## 984	18000	72.35495	male	12	73	white
## 985	20000	67.29746	male	16	71	white
## 986	16000	63.21394	female	12	46	hispanic
## 987	15000	69.21808	male	12	26	white
## 988	53000	62.87644	female	17	32	hispanic
## 989	26000	72.30503	male	12	27	white
## 990	4000	65.43678	female	12	28	other
## 991	10000	72.68583	male	16	59	white
## 992	43000	69.12368	male	12	51	white
## 993	17000	68.80012	male	14	33	other
## 994	4000	61.49719	female	12	38	hispanic
## 995	50000	73.19213	male	15	48	white
## 996	55000	66.86296	female	18	51	white
## 997	28000	63.07393	female	16	41	white
## 998	5000	62.15914	female	14	48	white
## 999	18000	65.39749	female	13	49	white
## 1000	21000	71.56490	male	15	62	hispanic
## 1001	12000	67.19160	female	12	33	white
## 1002	33000	65.49676	female	16	62	hispanic
## 1003	50000	72.42630	male	13	64	hispanic
## 1004	6000	65.38834	female	9	74	hispanic
## 1005	16000	63.81682	female	14	59	white
## 1006	35000	68.20842	male	12	50	white
## 1007	25000	68.29211	female	12	43	white
## 1008	20000	76.38236	male	14	26	white
## 1009	18000	62.61693	female	12	36	white
## 1010	34000	74.39722	male	14	78	white
## 1011	25000	68.47598	male	16	25	white
## 1012	20000	72.08176	male	17	77	white
## 1013	33000	67.56834	male	12	69	white
## 1014	4000	64.54943	female	12	73	white
## 1015	20000	60.10434	female	8	77	white

##	1016	40000	72.36485	male	16	33	white
##	1017	14000	63.72689	female	14	40	white
##	1018	12000	68.01107	female	12	48	white
##	1019	25000	61.14690	female	12	31	white
##	1020	70000	67.08765	female	10	72	white
##	1021	38000	67.20368	female	17	55	white
##	1022	14000	63.04842	female	12	28	white
##	1023	15000	60.24540	female	13	37	white
##	1024	17000	73.56450	male	16	31	white
##	1025	60000	68.81879	male	14	66	white
##	1026	15000	66.74730	female	15	69	white
##	1027	25000	64.91763	male	16	86	white
##	1028	18000	62.20893	male	12	63	hispanic
##	1029	70000	71.82154	male	18	47	white
##	1030	30000	64.57803	female	18	59	white
##	1031	8000	62.36229	female	12	51	white
##	1032	30000	70.92462	male	16	34	white
##	1033	27000	71.35941	male	14	32	white
##	1034	47000	70.07702	male	18	43	white
##	1035	12000	66.55482	male	12	22	hispanic
##	1036	24000	61.77156	female	17	34	white
##	1037	13000	62.89387	female	12	35	hispanic
##	1038	80000	60.81635	female	14	37	white
##	1039	5000	71.81258	male	12	18	white
##	1040	25000	62.51972	female	10	60	white
##	1041	28000	65.83384	male	12	44	white
##	1042	8000	64.12672	female	15	20	white
##	1043	10000	66.43378	female	13	51	white
##	1044	9000	68.26159	female	14	41	white
##	1045	20000	59.55762	female	12	37	white
##	1046	12000	65.18920	male	12	71	white
##	1047	15000	64.76620	female	14	66	white
##	1048	20000	61.33605	female	14	36	white
##	1049	28000	63.90803	female	14	36	white
##	1050	265	65.98172	female	15	21	white
##	1051	35000	69.35291	male	14	74	white
##	1052	26000	65.99869	female	14	32	hispanic
##	1053	27000	66.64220	female	17	34	white
##	1054	14000	68.37846	female	12	30	white
##	1055	32000	65.51632	male	16	33	white
##	1056	10000	69.09659	female	14	32	white
##	1057	7000	69.32438	male	16	30	white
##	1058	28000	71.01265	male	17	46	white
##	1059	60000	73.87646	male	13	54	white
##	1060	12000	68.53997	male	4	62	white
##	1061	15000	75.15666	female	13	75	white
##	1062	15000	71.85208	male	11	63	white
##	1063	26000	64.38789	female	15	32	white
##	1064	26000	71.68615	male	16	25	hispanic
##	1065	18720	62.75757	female	10	36	black
##	1066	12000	63.80686	female	12	73	black
##	1067	80000	70.42836	male	17	39	white
##	1068	48000	66.41484	female	13	39	white
##	1069	18000	62.49871	male	16	27	other

##	1070	85000	69.73083	male	15	65	white
##	1071	35000	63.64059	female	12	47	black
##	1072	5000	68.70302	male	16	22	white
##	1073	9000	64.18301	female	13	22	hispanic
##	1074	30000	67.13533	female	16	27	white
##	1075	80000	71.67133	male	14	58	white
##	1076	35000	65.06636	female	16	32	white
##	1077	12000	63.38769	female	14	34	white
##	1078	200000	69.66276	male	18	34	white
##	1079	4000	64.20871	female	16	45	white
##	1080	2000	68.04928	male	12	18	white
##	1081	24000	65.95546	female	18	69	white
##	1082	2000	66.31635	male	15	23	hispanic
##	1083	15000	69.68933	male	17	30	white
##	1084	6000	62.25103	female	12	65	white
##	1085	5000	65.91611	male	12	75	white
##	1086	1500	66.49011	female	12	21	hispanic
##	1087	28000	63.54176	female	18	48	white
##	1088	9000	69.91641	female	12	35	white
##	1089	60000	74.14910	male	14	52	white
##	1090	1200	65.50048	male	12	19	white
##	1091	1400	61.64302	female	3	64	hispanic
##	1092	7000	66.43334	female	13	43	white
##	1093	21000	62.27002	female	12	31	white
##	1094	44000	69.05178	male	12	58	white
##	1095	29000	67.69980	male	16	36	black
##	1096	3000	71.82785	male	14	18	hispanic
##	1097	12000	64.32170	male	13	22	black
##	1098	20000	72.47294	male	12	28	hispanic
##	1099	1200	61.72064	female	5	73	black
##	1100	37000	73.76301	male	16	25	white
##	1101	8000	66.28669	male	10	60	other
##	1102	35000	67.89220	male	16	30	hispanic
##	1103	25000	61.94551	male	14	37	other
##	1104	18000	71.17571	female	10	29	white
##	1105	30000	62.52137	female	16	36	black
##	1106	20000	69.24438	male	18	69	white
##	1107	12000	71.20133	male	6	40	hispanic
##	1108	10000	65.93158	female	12	68	white
##	1109	18000	71.89919	male	14	48	white
##	1110	20000	72.11578	male	12	26	black
##	1111	31000	67.54589	female	16	43	white
##	1112	6000	63.50634	male	10	36	hispanic
##	1113	12000	69.84664	male	13	40	white
##	1114	13000	66.35971	female	16	33	white
##	1115	26000	66.51458	female	17	34	white
##	1116	15000	68.06513	female	11	31	black
##	1117	30000	63.77365	female	17	28	white
##	1118	2000	64.70483	female	14	41	white
##	1119	5000	69.95972	male	13	22	other
##	1120	53000	71.26888	female	14	26	white
##	1121	2000	61.87336	female	13	18	white
##	1122	25000	70.85695	male	17	29	white
##	1123	5000	74.30637	male	12	18	white

##	1124	21000	64.20481	female	13	27	white
##	1125	17000	69.74732	female	15	27	white
##	1126	12000	64.00159	female	13	37	white
##	1127	42000	69.62591	male	14	44	hispanic
##	1128	21000	73.66522	male	12	33	white
##	1129	6000	62.72194	female	12	65	hispanic
##	1130	25000	73.55019	male	14	24	white
##	1131	3000	66.08877	female	14	19	white
##	1132	3600	65.39048	female	15	67	white
##	1133	4000	70.91890	male	12	19	white
##	1134	20000	68.52425	male	14	58	white
##	1135	52000	60.29879	male	15	50	white
##	1136	60000	64.01087	female	12	43	white
##	1137	15000	63.81617	female	13	41	white
##	1138	90000	71.89981	male	16	50	white
##	1139	26000	61.41213	female	14	65	white
##	1140	2000	68.69143	male	12	21	white
##	1141	16000	67.11030	female	12	61	white
##	1142	24000	64.56858	female	11	27	hispanic
##	1143	15000	68.26174	male	16	28	hispanic
##	1144	42000	74.42452	male	17	43	white
##	1145	10000	65.19333	female	12	43	white
##	1146	17000	70.70130	male	13	36	hispanic
##	1147	30000	64.43980	female	14	34	white
##	1148	32000	68.86163	female	17	37	white
##	1149	36000	64.38678	female	17	34	hispanic
##	1150	10000	71.90196	male	13	20	hispanic
##	1151	20000	62.55289	female	15	29	white
##	1152	24000	64.88607	female	12	29	white
##	1153	17000	71.65621	male	12	32	white
##	1154	23000	65.15171	female	14	48	white
##	1155	25000	64.28045	female	12	33	white
##	1156	50000	70.88341	male	12	50	white
##	1157	20000	61.76662	female	12	30	white
##	1158	30000	66.27003	female	16	33	white
##	1159	7000	64.07142	female	10	39	white
##	1160	7000	66.80599	male	10	78	white
##	1161	30000	68.07656	male	11	32	white
##	1162	3000	65.75189	female	12	24	white
##	1163	20000	66.01494	female	14	43	white
##	1164	40000	65.76547	female	16	59	white
##	1165	10000	66.74771	male	12	77	white
##	1166	16000	66.14089	male	12	37	white
##	1167	11000	63.30037	female	9	51	white
##	1168	16000	67.61928	female	13	43	white
##	1169	18000	70.42987	male	12	27	white
##	1170	12000	62.62478	female	16	26	white
##	1171	4000	69.98806	male	14	21	black
##	1172	60000	71.81932	male	12	45	white
##	1173	43000	74.77192	male	17	40	white
##	1174	31000	61.96560	female	14	39	white
##	1175	50000	68.21042	female	17	39	white
##	1176	27000	68.04935	female	14	29	white
##	1177	30000	70.49075	male	17	56	white

##	1178	12000	73.38321	male	13	21	black
##	1179	20000	62.13713	female	17	30	white
##	1180	15000	59.77629	female	12	76	black
##	1181	25000	64.15965	female	16	37	other
##	1182	2000	60.19710	female	6	67	hispanic
##	1183	3000	73.26521	male	15	20	hispanic
##	1184	110000	66.31204	female	18	48	other
##	1185	55000	68.99589	male	18	71	white
##	1186	58000	70.34337	male	18	53	white
##	1187	10000	70.05628	female	16	36	white
##	1188	19000	72.16573	male	12	29	white
##	1189	15000	61.13580	female	18	82	white
##	1190	8000	63.66416	female	12	33	white
##	1191	60000	71.92584	male	12	50	white
##	1192	6000	68.36849	male	12	27	white

california_df

##		date	state	fips	cases	deaths
##	6	2020-01-25	California	6	1	0
##	10	2020-01-26	California	6	2	0
##	14	2020-01-27	California	6	2	0
##	18	2020-01-28	California	6	2	0
##	22	2020-01-29	California	6	2	0
##	26	2020-01-30	California	6	2	0
##	30	2020-01-31	California	6	3	0
##	34	2020-02-01	California	6	3	0
##	39	2020-02-02	California	6	6	0
##	44	2020-02-03	California	6	6	0
##	49	2020-02-04	California	6	6	0
##	54	2020-02-05	California	6	6	0
##	60	2020-02-06	California	6	6	0
##	66	2020-02-07	California	6	6	0
##	72	2020-02-08	California	6	6	0
##	78	2020-02-09	California	6	6	0
##	84	2020-02-10	California	6	7	0
##	90	2020-02-11	California	6	7	0
##	96	2020-02-12	California	6	7	0
##	103	2020-02-13	California	6	7	0
##	110	2020-02-14	California	6	7	0
##	117	2020-02-15	California	6	7	0
##	124	2020-02-16	California	6	7	0
##	131	2020-02-17	California	6	7	0
##	139	2020-02-18	California	6	7	0
##	147	2020-02-19	California	6	7	0
##	155	2020-02-20	California	6	8	0
##	163	2020-02-21	California	6	9	0
##	171	2020-02-22	California	6	9	0
##	179	2020-02-23	California	6	9	0
##	187	2020-02-24	California	6	11	0
##	195	2020-02-25	California	6	11	0
##	204	2020-02-26	California	6	26	0
##	213	2020-02-27	California	6	26	0
##	222	2020-02-28	California	6	27	0

##	232	2020-02-29	California	6	28	0
##	242	2020-03-01	California	6	33	0
##	255	2020-03-02	California	6	38	0
##	270	2020-03-03	California	6	45	0
##	286	2020-03-04	California	6	55	1
##	303	2020-03-05	California	6	67	1
##	324	2020-03-06	California	6	81	1
##	352	2020-03-07	California	6	100	1
##	385	2020-03-08	California	6	112	1
##	420	2020-03-09	California	6	172	2
##	457	2020-03-10	California	6	179	3
##	497	2020-03-11	California	6	202	4
##	543	2020-03-12	California	6	252	4
##	591	2020-03-13	California	6	320	5
##	642	2020-03-14	California	6	381	5
##	694	2020-03-15	California	6	478	6
##	747	2020-03-16	California	6	588	11
##	800	2020-03-17	California	6	732	14
##	854	2020-03-18	California	6	893	17
##	908	2020-03-19	California	6	1067	19
##	962	2020-03-20	California	6	1283	24
##	1016	2020-03-21	California	6	1544	28
##	1070	2020-03-22	California	6	1851	35
##	1124	2020-03-23	California	6	2240	39
##	1178	2020-03-24	California	6	2644	52
##	1232	2020-03-25	California	6	3183	67
##	1286	2020-03-26	California	6	4060	82
##	1340	2020-03-27	California	6	4914	102
##	1394	2020-03-28	California	6	5565	121
##	1449	2020-03-29	California	6	6266	130
##	1504	2020-03-30	California	6	7421	146
##	1559	2020-03-31	California	6	8582	183
##	1614	2020-04-01	California	6	9816	212
##	1669	2020-04-02	California	6	11190	247
##	1724	2020-04-03	California	6	12569	282
##	1779	2020-04-04	California	6	13796	323
##	1834	2020-04-05	California	6	15076	349
##	1889	2020-04-06	California	6	16284	386
##	1944	2020-04-07	California	6	17540	447
##	1999	2020-04-08	California	6	19043	506
##	2054	2020-04-09	California	6	20191	548
##	2109	2020-04-10	California	6	21366	594
##	2164	2020-04-11	California	6	22421	632
##	2219	2020-04-12	California	6	23323	676
##	2274	2020-04-13	California	6	24334	725
##	2329	2020-04-14	California	6	25758	778
##	2384	2020-04-15	California	6	27107	885
##	2439	2020-04-16	California	6	28142	971
##	2494	2020-04-17	California	6	29398	1050
##	2549	2020-04-18	California	6	30829	1146
##	2604	2020-04-19	California	6	31544	1176
##	2659	2020-04-20	California	6	33862	1223
##	2714	2020-04-21	California	6	35844	1316
##	2769	2020-04-22	California	6	37573	1425

##	2824	2020-04-23	California	6	39534	1553
##	2879	2020-04-24	California	6	41368	1619
##	2934	2020-04-25	California	6	42347	1677
##	2989	2020-04-26	California	6	43691	1716

ny_df

##		date	state	fips	cases	deaths
##	247	2020-03-01	New York	36	1	0
##	262	2020-03-02	New York	36	1	0
##	277	2020-03-03	New York	36	2	0
##	294	2020-03-04	New York	36	11	0
##	314	2020-03-05	New York	36	22	0
##	339	2020-03-06	New York	36	44	0
##	370	2020-03-07	New York	36	89	0
##	405	2020-03-08	New York	36	106	0
##	441	2020-03-09	New York	36	142	0
##	479	2020-03-10	New York	36	173	0
##	522	2020-03-11	New York	36	217	0
##	569	2020-03-12	New York	36	326	0
##	619	2020-03-13	New York	36	421	0
##	670	2020-03-14	New York	36	610	2
##	723	2020-03-15	New York	36	732	6
##	776	2020-03-16	New York	36	950	10
##	829	2020-03-17	New York	36	1374	17
##	883	2020-03-18	New York	36	2382	27
##	937	2020-03-19	New York	36	4152	30
##	991	2020-03-20	New York	36	7102	57
##	1045	2020-03-21	New York	36	10356	80
##	1099	2020-03-22	New York	36	15168	122
##	1153	2020-03-23	New York	36	20875	159
##	1207	2020-03-24	New York	36	25665	218
##	1261	2020-03-25	New York	36	33066	325
##	1315	2020-03-26	New York	36	38987	432
##	1369	2020-03-27	New York	36	44635	535
##	1423	2020-03-28	New York	36	53363	782
##	1478	2020-03-29	New York	36	59568	965
##	1533	2020-03-30	New York	36	67174	1224
##	1588	2020-03-31	New York	36	75832	1550
##	1643	2020-04-01	New York	36	83889	1941
##	1698	2020-04-02	New York	36	92381	2373
##	1753	2020-04-03	New York	36	102870	2935
##	1808	2020-04-04	New York	36	114996	3568
##	1863	2020-04-05	New York	36	122911	4161
##	1918	2020-04-06	New York	36	130689	4758
##	1973	2020-04-07	New York	36	140081	5563
##	2028	2020-04-08	New York	36	149401	6268
##	2083	2020-04-09	New York	36	159937	7067
##	2138	2020-04-10	New York	36	170512	7844
##	2193	2020-04-11	New York	36	180458	8627
##	2248	2020-04-12	New York	36	188694	9385
##	2303	2020-04-13	New York	36	195031	10056
##	2358	2020-04-14	New York	36	202208	10834
##	2413	2020-04-15	New York	36	213779	11586

##	2468	2020-04-16	New York	36	222284	12192
##	2523	2020-04-17	New York	36	229642	12822
##	2578	2020-04-18	New York	36	236763	13362
##	2633	2020-04-19	New York	36	242817	13869
##	2688	2020-04-20	New York	36	247543	14347
##	2743	2020-04-21	New York	36	251720	14828
##	2798	2020-04-22	New York	36	257246	15302
##	2853	2020-04-23	New York	36	263460	15740
##	2908	2020-04-24	New York	36	271621	16162
##	2963	2020-04-25	New York	36	282174	16599
##	3018	2020-04-26	New York	36	288076	16966

florida_df

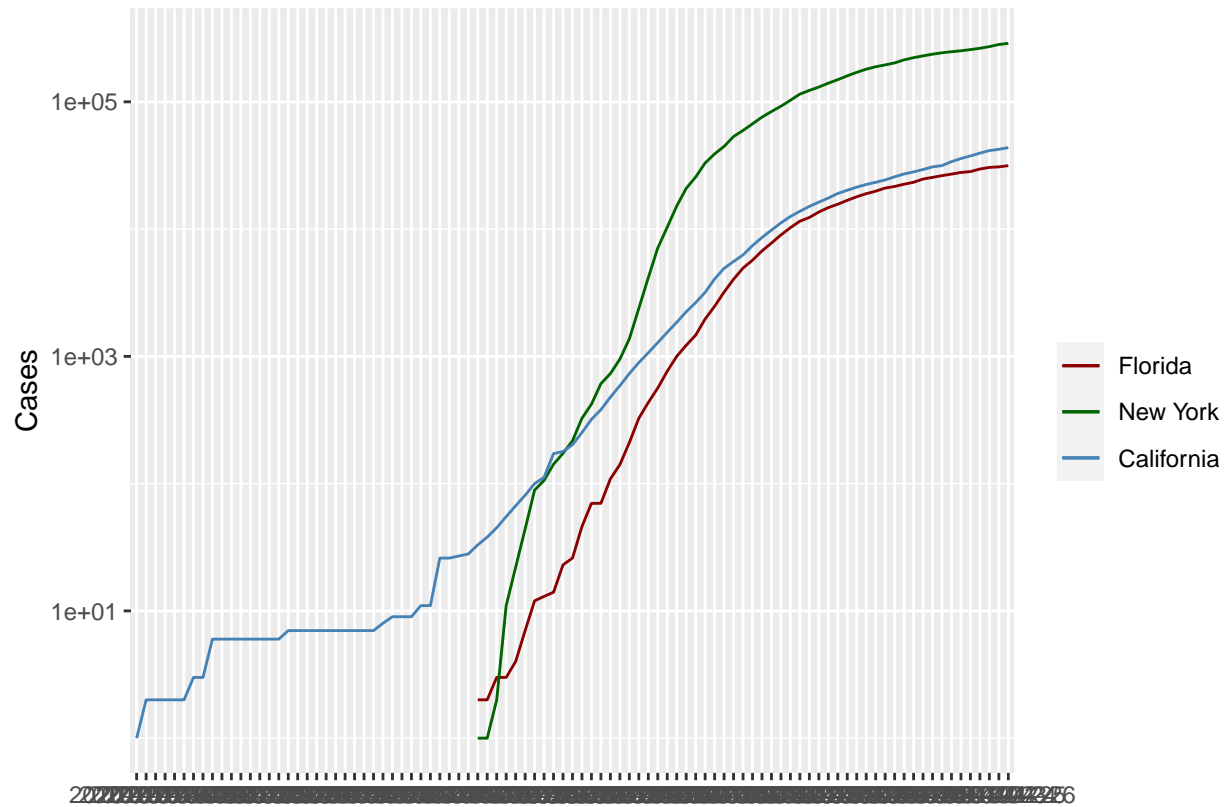
##		date	state	fips	cases	deaths
##	243	2020-03-01	Florida	12	2	0
##	256	2020-03-02	Florida	12	2	0
##	271	2020-03-03	Florida	12	3	0
##	287	2020-03-04	Florida	12	3	0
##	305	2020-03-05	Florida	12	4	0
##	326	2020-03-06	Florida	12	7	2
##	355	2020-03-07	Florida	12	12	2
##	389	2020-03-08	Florida	12	13	2
##	424	2020-03-09	Florida	12	14	2
##	461	2020-03-10	Florida	12	23	2
##	502	2020-03-11	Florida	12	26	2
##	548	2020-03-12	Florida	12	46	2
##	596	2020-03-13	Florida	12	70	2
##	647	2020-03-14	Florida	12	70	3
##	699	2020-03-15	Florida	12	109	3
##	752	2020-03-16	Florida	12	141	4
##	805	2020-03-17	Florida	12	210	6
##	859	2020-03-18	Florida	12	326	7
##	913	2020-03-19	Florida	12	434	8
##	967	2020-03-20	Florida	12	564	9
##	1021	2020-03-21	Florida	12	764	11
##	1075	2020-03-22	Florida	12	1000	13
##	1129	2020-03-23	Florida	12	1222	18
##	1183	2020-03-24	Florida	12	1467	19
##	1237	2020-03-25	Florida	12	1965	23
##	1291	2020-03-26	Florida	12	2477	29
##	1345	2020-03-27	Florida	12	3198	46
##	1399	2020-03-28	Florida	12	4038	56
##	1454	2020-03-29	Florida	12	4942	59
##	1509	2020-03-30	Florida	12	5694	71
##	1564	2020-03-31	Florida	12	6741	85
##	1619	2020-04-01	Florida	12	7765	100
##	1674	2020-04-02	Florida	12	9000	144
##	1729	2020-04-03	Florida	12	10260	169
##	1784	2020-04-04	Florida	12	11537	194
##	1839	2020-04-05	Florida	12	12342	220
##	1894	2020-04-06	Florida	12	13621	253
##	1949	2020-04-07	Florida	12	14739	295
##	2004	2020-04-08	Florida	12	15690	322

```
## 2059 2020-04-09 Florida 12 16819 370
## 2114 2020-04-10 Florida 12 17960 418
## 2169 2020-04-11 Florida 12 18978 445
## 2224 2020-04-12 Florida 12 19855 460
## 2279 2020-04-13 Florida 12 21011 498
## 2334 2020-04-14 Florida 12 21620 570
## 2389 2020-04-15 Florida 12 22526 613
## 2444 2020-04-16 Florida 12 23332 667
## 2499 2020-04-17 Florida 12 24745 725
## 2554 2020-04-18 Florida 12 25484 747
## 2609 2020-04-19 Florida 12 26306 773
## 2664 2020-04-20 Florida 12 27050 822
## 2719 2020-04-21 Florida 12 27861 866
## 2774 2020-04-22 Florida 12 28301 926
## 2829 2020-04-23 Florida 12 29640 986
## 2884 2020-04-24 Florida 12 30525 1045
## 2939 2020-04-25 Florida 12 30831 1054
## 2994 2020-04-26 Florida 12 31520 1073
```

```
include=FALSE
```

NY Times COVID-19 Data

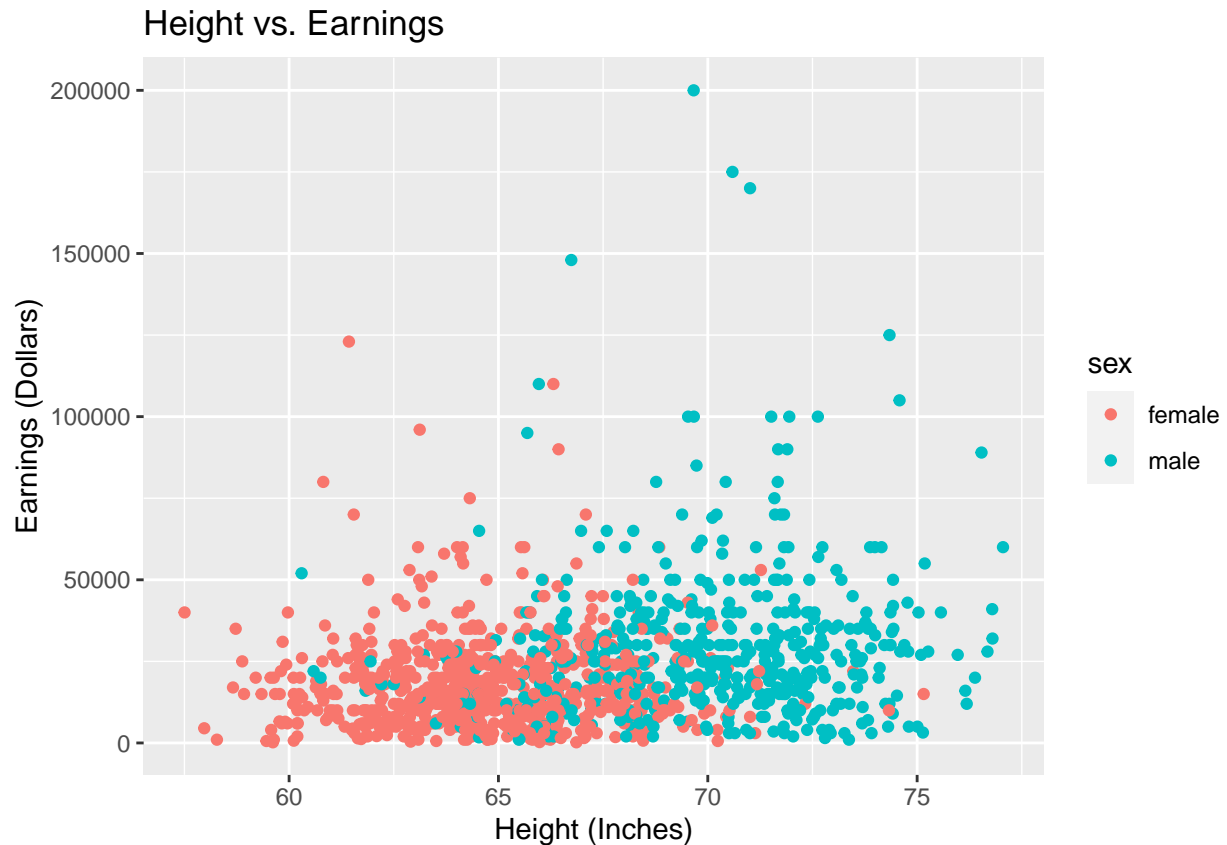
```
ggplot(data=florida_df, aes(x=date, group=1)) +
  geom_line(aes(y = cases, color = "Florida")) +
  geom_line(data=ny_df, aes(y = cases, color="New York")) +
  geom_line(data=california_df, aes(y = cases, color="California")) +
  scale_colour_manual("",
                      breaks = c("Florida", "New York", "California"),
                      values = c('darkred', 'darkgreen', 'steelblue')) +
  xlab("") + ylab("Cases") + scale_y_log10()
```



```
echo=FALSE
```

R4DS Height vs Earnings

```
ggplot(heights_df, aes(x=height, y=earn, col=sex)) + geom_point() + ggtitle('Height vs. Earnings') + xlab('Height') + ylab('Earnings')
```



```
echo=FALSE
```

Tables

Knitr Table with Kable

```
library(tinytex)
name <- c("Aragon", "Bilbo", "Frodo", "Galadriel", "Sam", "Gandalf", "Legolas", "Sauron", "Gollum")
race <- c("Men", "Hobbit", "Hobbit", "Elf", "Hobbit", "Maia", "Elf", "Maia", "Hobbit")
in_fellowship <- c(TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, TRUE, FALSE, FALSE)
ring_bearer <- c(FALSE, TRUE, TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, TRUE)
age <- c(88, 129, 51, 7000, 36, 2019, 2931, 7052, 589)
characters_df <- data.frame(name, race, in_fellowship, ring_bearer, age)
knitr::kable(characters_df[ , ], caption = 'One Ring to Rule Them All')
```

Table 1: One Ring to Rule Them All

name	race	in_fellowship	ring_bearer	age
Aragon	Men	TRUE	FALSE	88
Bilbo	Hobbit	FALSE	TRUE	129
Frodo	Hobbit	TRUE	TRUE	51

name	race	in_fellowship	ring_bearer	age
Galadriel	Elf	FALSE	FALSE	7000
Sam	Hobbit	TRUE	TRUE	36
Gandalf	Maia	TRUE	TRUE	2019
Legolas	Elf	TRUE	FALSE	2931
Sauron	Maia	FALSE	TRUE	7052
Gollum	Hobbit	FALSE	TRUE	589

Pandoc Table

Name | Race | In Fellowship? | Is Ring Bearer? | Age

Aragon | Men | Yes | No | 88 Bilbo | Hobbit | No | Yes | 129 Frodo | Hobbit | Yes | Yes | 51 Sam | Hobbit | Yes | Yes | 36 Sauron | Maia | No | Yes | 7052

References

- Field, A., J. Miles, and Z. Field. 2012. *Discovering Statistics Using r*. SAGE Publications. <https://books.google.com/books?id=wd2K2zC3swIC>.
- Lander, J. P. 2014. *R for Everyone: Advanced Analytics and Graphics*. Addison-Wesley Data and Analytics Series. Addison-Wesley. <https://books.google.com/books?id=3eBVAgAAQBAJ>.