

# Statistics Project 2

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```
sheet = read_excel("GDP.xlsx")
#Country, GDP, LEB
favstats(LEB ~ GDP, data = sheet)
```

##	GDP	min	Q1	median	Q3	max	mean	sd	n	missing
## 1	500	42.84	43.9650	45.090	46.2150	47.34	45.09000	3.1819805	2	0
## 2	600	37.98	41.8950	43.880	51.2700	71.40	49.28500	15.0136505	4	0
## 3	700	41.24	45.0850	48.930	49.4750	50.02	46.73000	4.7856139	3	0
## 4	800	35.25	43.4000	46.970	53.8475	60.97	48.08500	9.3021025	6	0
## 5	900	45.43	46.8250	48.220	49.6150	51.01	48.22000	3.9456558	2	0
## 6	1000	45.22	46.6850	48.150	56.2600	64.37	52.58000	10.3150036	3	0
## 7	1100	41.71	43.7725	47.770	56.4800	72.68	52.48250	14.0275120	4	0
## 8	1200	31.30	39.9050	48.510	57.3950	66.28	48.69667	17.4907471	3	0
## 9	1300	39.33	47.1950	55.060	62.9250	70.79	55.06000	22.2455793	2	0
## 10	1400	42.65	44.3225	49.230	54.9350	59.00	50.02750	7.6168733	4	0
## 11	1500	53.43	57.0250	60.620	64.2150	67.81	60.62000	10.1681955	2	0
## 12	1600	51.61	53.9900	56.370	60.0150	63.66	57.21333	6.0691048	3	0
## 13	1700	54.30	54.3400	54.380	59.1900	64.00	57.56000	5.5773470	3	0
## 14	1800	48.05	51.9300	55.790	63.8100	64.88	56.89200	7.3430865	5	0
## 15	1900	36.96	39.0100	57.730	57.9200	61.33	50.59000	11.6181905	5	0
## 16	2100	49.54	52.7050	55.870	59.0350	62.20	55.87000	8.9519718	2	0
## 17	2200	56.53	58.4450	60.360	62.2750	64.19	60.36000	5.4164379	2	0
## 18	2300	69.68	69.6800	69.680	69.6800	69.68	69.68000	NA	1	0
## 19	2400	64.78	64.7800	64.780	64.7800	64.78	64.78000	NA	1	0
## 20	2500	64.76	66.0825	67.405	68.7275	70.05	67.40500	3.7405949	2	0
## 21	2600	60.60	62.1125	63.625	65.1375	66.65	63.62500	4.2779960	2	0
## 22	2900	61.71	62.6650	63.620	70.2100	76.80	67.37667	8.2165341	3	0
## 23	3000	36.94	36.9400	36.940	36.9400	36.94	36.94000	NA	1	0
## 24	3200	68.94	68.9400	68.940	68.9400	68.94	68.94000	NA	1	0
## 25	3300	69.39	70.0150	70.640	71.2650	71.89	70.64000	1.7677670	2	0
## 26	3400	63.16	63.1600	63.160	63.1600	63.16	63.16000	NA	1	0
## 27	3500	66.68	66.6800	66.680	66.6800	66.68	66.68000	NA	1	0
## 28	3700	72.62	72.6200	72.620	72.6200	72.62	72.62000	NA	1	0
## 29	3900	75.85	75.8500	75.850	75.8500	75.85	75.85000	NA	1	0
## 30	4000	63.09	67.6950	69.635	70.1325	70.41	68.19250	3.4371730	4	0
## 31	4100	65.23	65.2300	65.230	65.2300	65.23	65.23000	NA	1	0
## 32	4300	77.88	77.8800	77.880	77.8800	77.88	77.88000	NA	1	0
## 33	4500	72.37	72.3700	72.370	72.3700	72.37	72.37000	NA	1	0
## 34	4600	69.29	69.2900	69.290	69.2900	69.29	69.29000	NA	1	0
## 35	4700	74.40	74.4000	74.400	74.4000	74.40	74.40000	NA	1	0
## 36	4800	70.62	71.3450	72.070	72.9400	73.81	72.16667	1.5971955	3	0
## 37	4900	39.47	39.4700	39.470	39.4700	39.47	39.47000	NA	1	0
## 38	5000	72.22	72.2200	72.220	72.2200	72.22	72.22000	NA	1	0
## 39	5100	70.88	70.8800	70.880	70.8800	70.88	70.88000	NA	1	0
## 40	5400	66.50	66.5000	66.500	66.5000	66.50	66.50000	NA	1	0
## 41	5500	57.12	61.3700	65.620	69.8700	74.12	65.62000	12.0208153	2	0
## 42	5800	61.19	63.1125	65.035	66.9575	68.88	65.03500	5.4376511	2	0

## 43	6000	67.96	68.6050	69.250	69.8950	70.54	69.25000	1.8243355	2	0
## 44	6100	68.43	69.3950	70.360	71.3250	72.29	70.36000	2.7294322	2	0
## 45	6300	63.48	67.3100	71.140	71.7300	72.32	68.98000	4.7995416	3	0
## 46	6400	76.07	76.0700	76.070	76.0700	76.07	76.07000	NA	1	0
## 47	6700	71.80	72.4725	73.145	73.8175	74.49	73.14500	1.9021172	2	0
## 48	6900	74.40	74.4000	74.400	74.4000	74.40	74.40000	NA	1	0
## 49	7000	69.35	69.6675	69.985	70.3025	70.62	69.98500	0.8980256	2	0
## 50	7200	42.77	42.7700	42.770	42.7700	42.77	42.77000	NA	1	0
## 51	7400	71.24	71.2400	71.240	71.2400	71.24	71.24000	NA	1	0
## 52	7600	71.13	71.2975	71.465	71.6325	71.80	71.46500	0.4737615	2	0
## 53	7900	77.53	77.5300	77.530	77.5300	77.53	77.53000	NA	1	0
## 54	8300	76.69	76.6900	76.690	76.6900	76.69	76.69000	NA	1	0
## 55	8900	67.66	67.6600	67.660	67.6600	67.66	67.66000	NA	1	0
## 56	9000	32.26	51.9650	71.670	71.9850	72.30	58.74333	22.9374025	3	0
## 57	9100	76.43	76.4300	76.430	76.4300	76.43	76.43000	NA	1	0
## 58	9500	69.59	69.5900	69.590	69.5900	69.59	69.59000	NA	1	0
## 59	9900	76.35	76.3500	76.350	76.3500	76.35	76.35000	NA	1	0
## 60	10200	69.31	69.3100	69.310	69.3100	69.31	69.31000	NA	1	0
## 61	10600	74.37	74.3700	74.370	74.3700	74.37	74.37000	NA	1	0
## 62	10700	46.56	46.5600	46.560	46.5600	46.56	46.56000	NA	1	0
## 63	11100	73.91	73.9100	73.910	73.9100	73.91	73.91000	NA	1	0
## 64	11200	75.48	75.4800	75.480	75.4800	75.48	75.48000	NA	1	0
## 65	11400	69.60	70.7000	71.800	73.5900	75.38	72.26000	2.9173275	3	0
## 66	11800	68.73	68.7300	68.730	68.7300	68.73	68.73000	NA	1	0
## 67	12300	70.31	70.3100	70.310	70.3100	70.31	70.31000	NA	1	0
## 68	12800	75.87	75.8700	75.870	75.8700	75.87	75.87000	NA	1	0
## 69	13100	72.58	72.5800	72.580	72.5800	72.58	72.58000	NA	1	0
## 70	13300	74.43	74.4300	74.430	74.4300	74.43	74.43000	NA	1	0
## 71	13900	72.17	72.1700	72.170	72.1700	72.17	72.17000	NA	1	0
## 72	14400	78.72	78.7200	78.720	78.7200	78.72	78.72000	NA	1	0
## 73	15000	73.52	73.5200	73.520	73.5200	73.52	73.52000	NA	1	0
## 74	15700	71.84	72.6750	73.510	74.3450	75.18	73.51000	2.3617366	2	0
## 75	16700	65.71	65.7100	65.710	65.7100	65.71	65.71000	NA	1	0
## 76	16800	77.26	77.2600	77.260	77.2600	77.26	77.26000	NA	1	0
## 77	16900	73.72	73.7200	73.720	73.7200	73.72	73.72000	NA	1	0
## 78	17500	75.45	75.4500	75.450	75.4500	75.45	75.45000	NA	1	0
## 79	17700	78.43	78.4300	78.430	78.4300	78.43	78.43000	NA	1	0
## 80	17800	75.36	75.3600	75.360	75.3600	75.36	75.36000	NA	1	0
## 81	18000	76.35	76.3500	76.350	76.3500	76.35	76.35000	NA	1	0
## 82	19000	75.51	75.7950	76.080	76.3650	76.65	76.08000	0.8061017	2	0
## 83	19400	81.87	81.8700	81.870	81.8700	81.87	81.87000	NA	1	0
## 84	19800	79.02	79.0200	79.020	79.0200	79.02	79.02000	NA	1	0
## 85	20000	78.89	78.8900	78.890	78.8900	78.89	78.89000	NA	1	0
## 86	21500	73.14	73.1400	73.140	73.1400	73.14	73.14000	NA	1	0
## 87	21600	78.32	78.3200	78.320	78.3200	78.32	78.32000	NA	1	0
## 88	22000	79.23	79.2300	79.230	79.2300	79.23	79.23000	NA	1	0
## 89	23200	74.75	74.7500	74.750	74.7500	74.75	74.75000	NA	1	0
## 90	23400	76.87	76.8700	76.870	76.8700	76.87	76.87000	NA	1	0
## 91	23600	74.30	74.3000	74.300	74.3000	74.30	74.30000	NA	1	0
## 92	23700	80.42	80.4200	80.420	80.4200	80.42	80.42000	NA	1	0
## 93	26700	79.40	79.4000	79.400	79.4000	79.40	79.40000	NA	1	0
## 94	26800	79.97	80.8500	81.730	82.6100	83.49	81.73000	2.4890159	2	0
## 95	27400	77.92	77.9200	77.920	77.9200	77.92	77.92000	NA	1	0
## 96	27600	78.42	78.6350	78.850	79.0650	79.28	78.85000	0.6081118	2	0

```
## 97 27700 78.16 78.1600 78.160 78.1600 78.16 78.16000 NA 1 0
## 98 28200 80.93 80.9300 80.930 80.9300 80.93 80.93000 NA 1 0
## 99 28500 77.98 77.9800 77.980 77.9800 77.98 77.98000 NA 1 0
## 100 28600 78.74 78.7400 78.740 78.7400 78.74 78.74000 NA 1 0
## 101 28800 79.93 79.9300 79.930 79.9300 79.93 79.93000 NA 1 0
## 102 29000 80.13 80.1300 80.130 80.1300 80.13 80.13000 NA 1 0
## 103 29100 78.29 78.2900 78.290 78.2900 78.29 78.29000 NA 1 0
## 104 29600 77.35 77.3500 77.350 77.3500 77.35 77.35000 NA 1 0
## 105 29800 79.83 79.8300 79.830 79.8300 79.83 79.83000 NA 1 0
## 106 30000 78.17 78.1700 78.170 78.1700 78.17 78.17000 NA 1 0
## 107 30900 79.80 79.8000 79.800 79.8000 79.80 79.80000 NA 1 0
## 108 31100 77.10 77.1000 77.100 77.1000 77.10 77.10000 NA 1 0
## 109 32700 79.99 79.9900 79.990 79.9900 79.99 79.99000 NA 1 0
## 110 36000 77.41 77.4100 77.410 77.4100 77.41 77.41000 NA 1 0
## 111 37800 77.14 77.6275 78.115 78.6025 79.09 78.11500 1.3788582 2 0
## 112 40000 78.93 79.2075 79.485 79.7625 80.04 79.48500 0.7848885 2 0
## 113 55100 77.66 77.6600 77.660 77.6600 77.66 77.66000 NA 1 0
```

```
anova(lm(LEB ~ GDP, data = sheet))
```

```
## Analysis of Variance Table
```

```
##
```

```
## Response: LEB
```

```
##          Df Sum Sq Mean Sq F value    Pr(>F)
```

```
## GDP          1  11691    11691  119.27 < 2.2e-16 ***
```

```
## Residuals 178   17448         98
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

*Introduction*

*Summary & Visualization*

*Correlation Test*

*Regression*

*Teamwork*