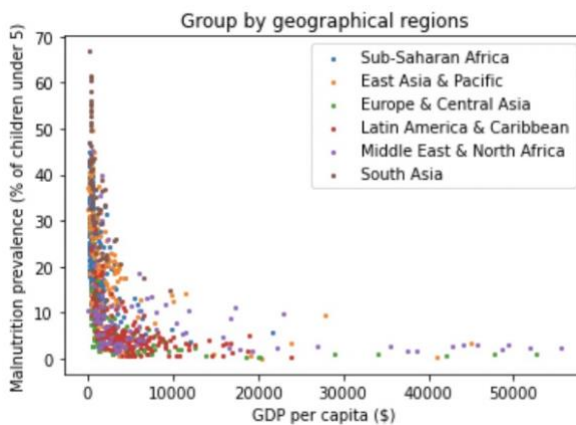
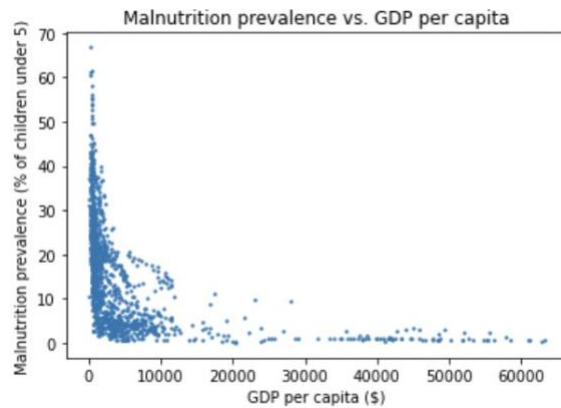
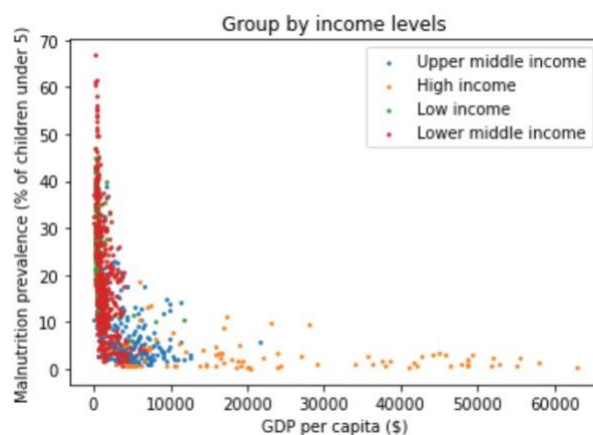


HW#2: qichaow

1. I think the richer the country is, the fewer children with malnutrition. The first scatter plot supports my hypothesis by showing that there is a negative correlation--the higher the GDP per capita, the lower the percentage of children with malnutrition.

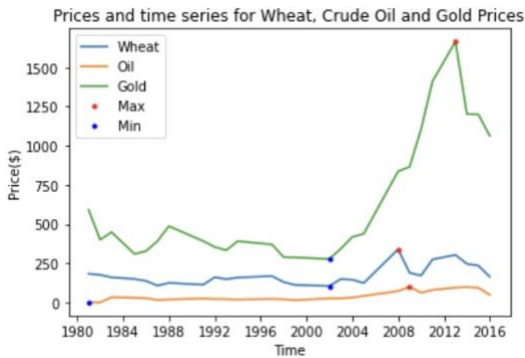


The second plot by geographical regions shows that all the regions have a negative correlation. However, some regions might have a weaker correlation such as East Asia & Pacific shown in orange.



The third plot by income levels reveals that all the income group shows a negative correlation, which is stronger than the geographical location.

2. The graph shows that the maximum prices of all three reached at a similar time between 2008 and 2012. Gold and Wheat both reached their minimum in 2001. The prices of oil and Wheat did not fluctuate much since 1980, but Gold has risen almost 2 times from its original price.

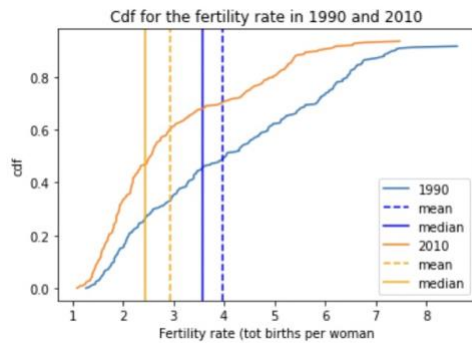
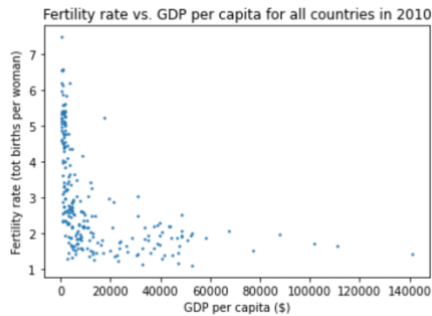


3. The first table shows the statistics for CO2 and the second table shows the school enrolment. CO2 data might have outliers since the max is much greater than mean.

```
count      239.000000
mean        4.333087
std         5.016823
min         0.034580
25%         0.721447
50%         2.682569
75%         6.084064
max         32.634302
Name: 2010, dtype: float64
CO2: 5% 0.11287533029999999
CO2: 95% 15.510796306999998
```

```
count      166.000000
mean       90.105088
std        9.527627
min        45.077410
25%        87.801005
50%        92.956725
75%        95.934427
max        99.713540
Name: 2010, dtype: float64
School: 5% 66.65682
School: 95% 98.87278749999999
```

4. The Scatter plot of Fertility rate vs. GDP per capita shows a weak negative correlation.



This plot shows that the fertility rates decreased in 2010 compared to 1990. I plotted lines for mean and median. We can see both lines of mean and median have shifted to the left. This might indicate that the GDP per capita increased from 1990 to 2010 since fertility and GDP per capita are negatively correlated.

5. The scatter plot shows that HPI and CPI are not correlated. The perceived corruption by the government is not correlated with sustainable well-being. HPI is about how countries use environmental resources to lead long happy lives. There are some countries standing out. One obvious one is Luxemburg which has low CPI and very high HPI.

