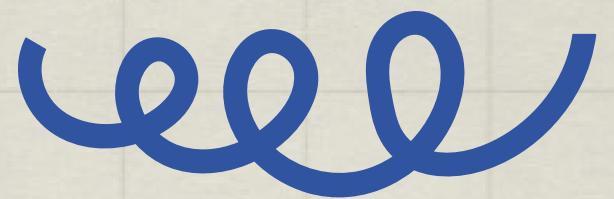
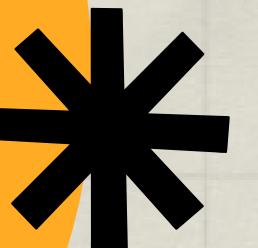




-CATEGORIZING COUNTRIES THAT NEED HELP

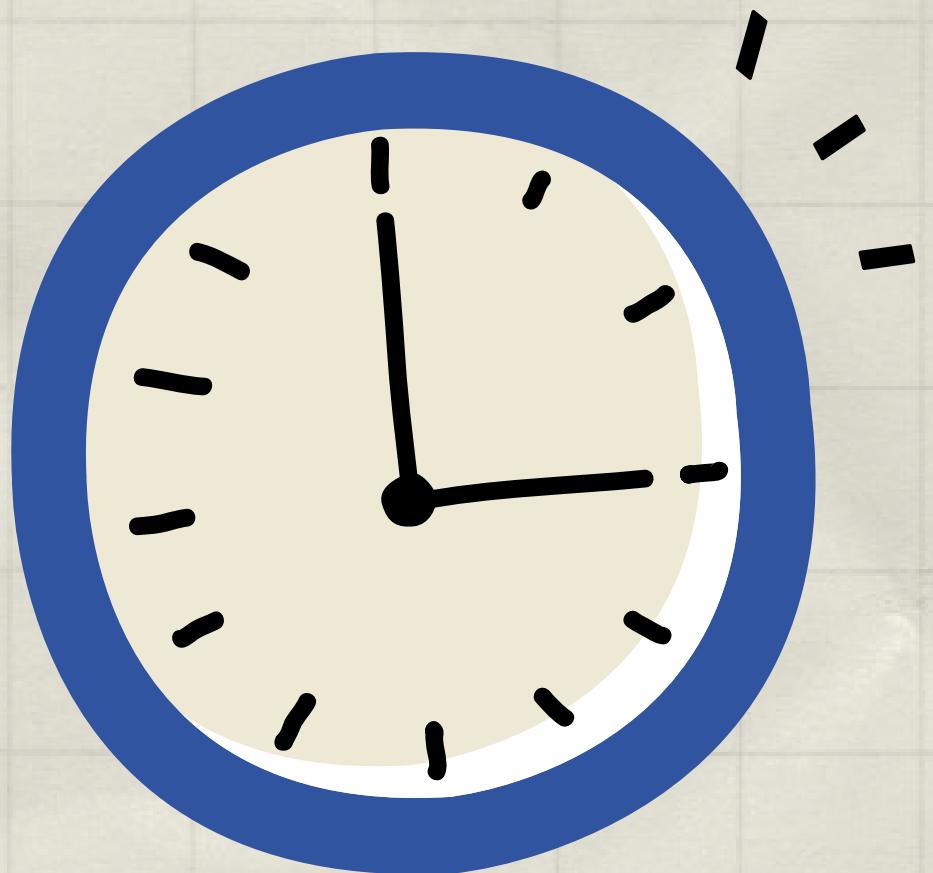


READING AND UNDERSTANDING DATA



From the data provided, we get a number of information, namely:

1. The data consists of 167 rows and 10 columns
2. No NaN data or empty data



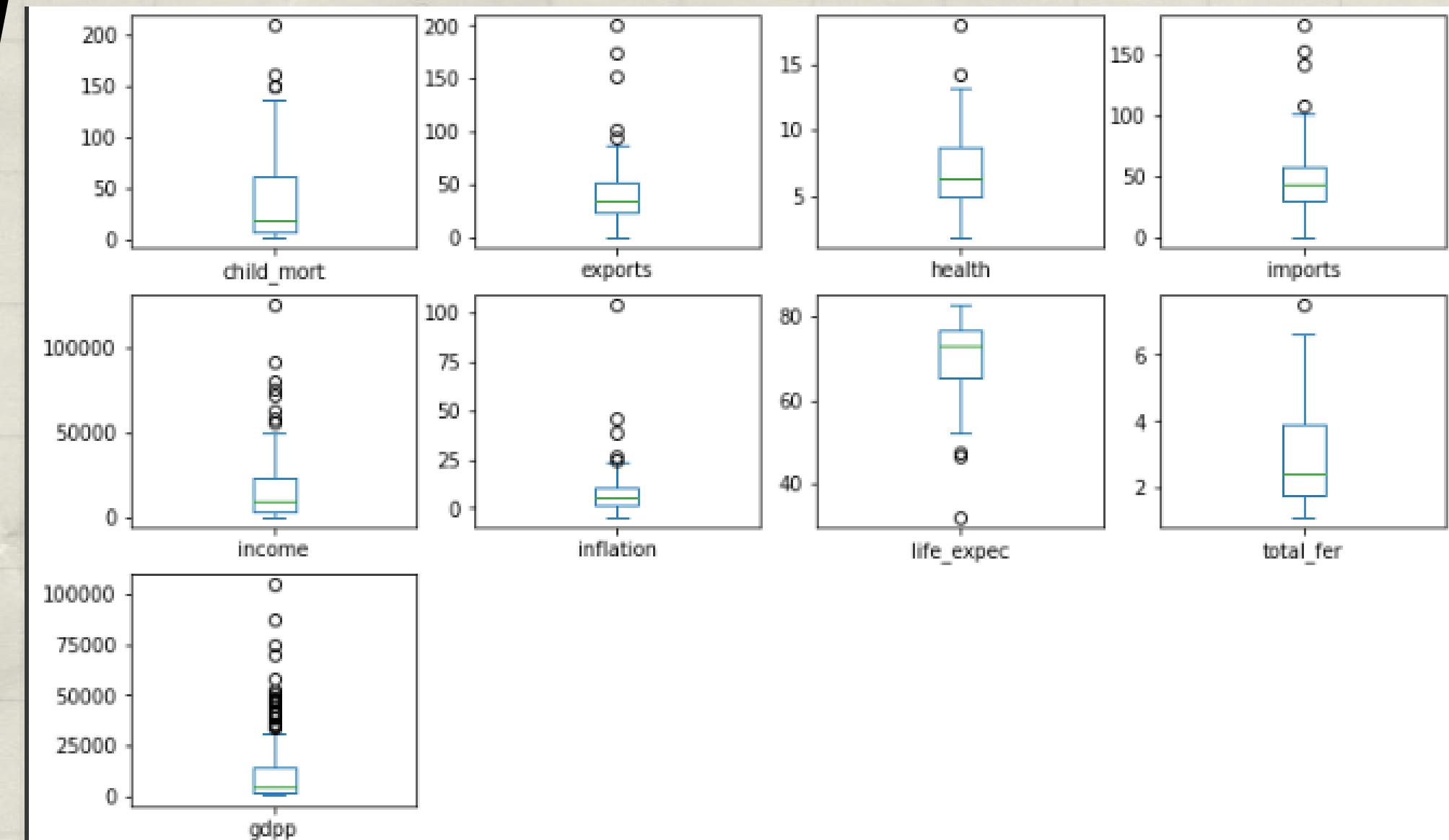
EXPLORATORY DATA ANALYSIS

At this stage we carried out 3 types of analysis, namely:

1. Univariate analysis
2. Bivariate analysis
3. Multivariate analysis

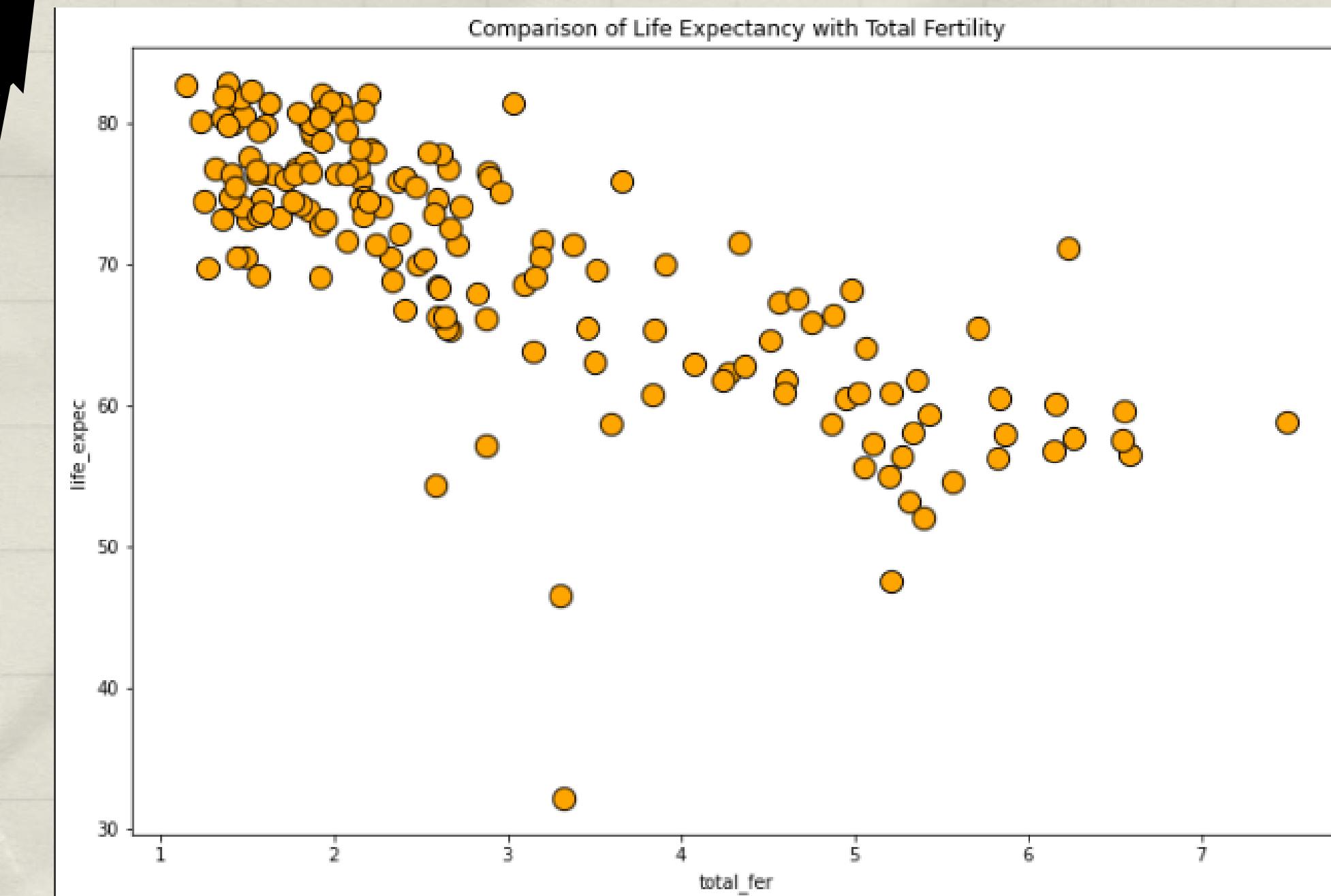
Univariate

We performed univariate to see the outlier values in each column..



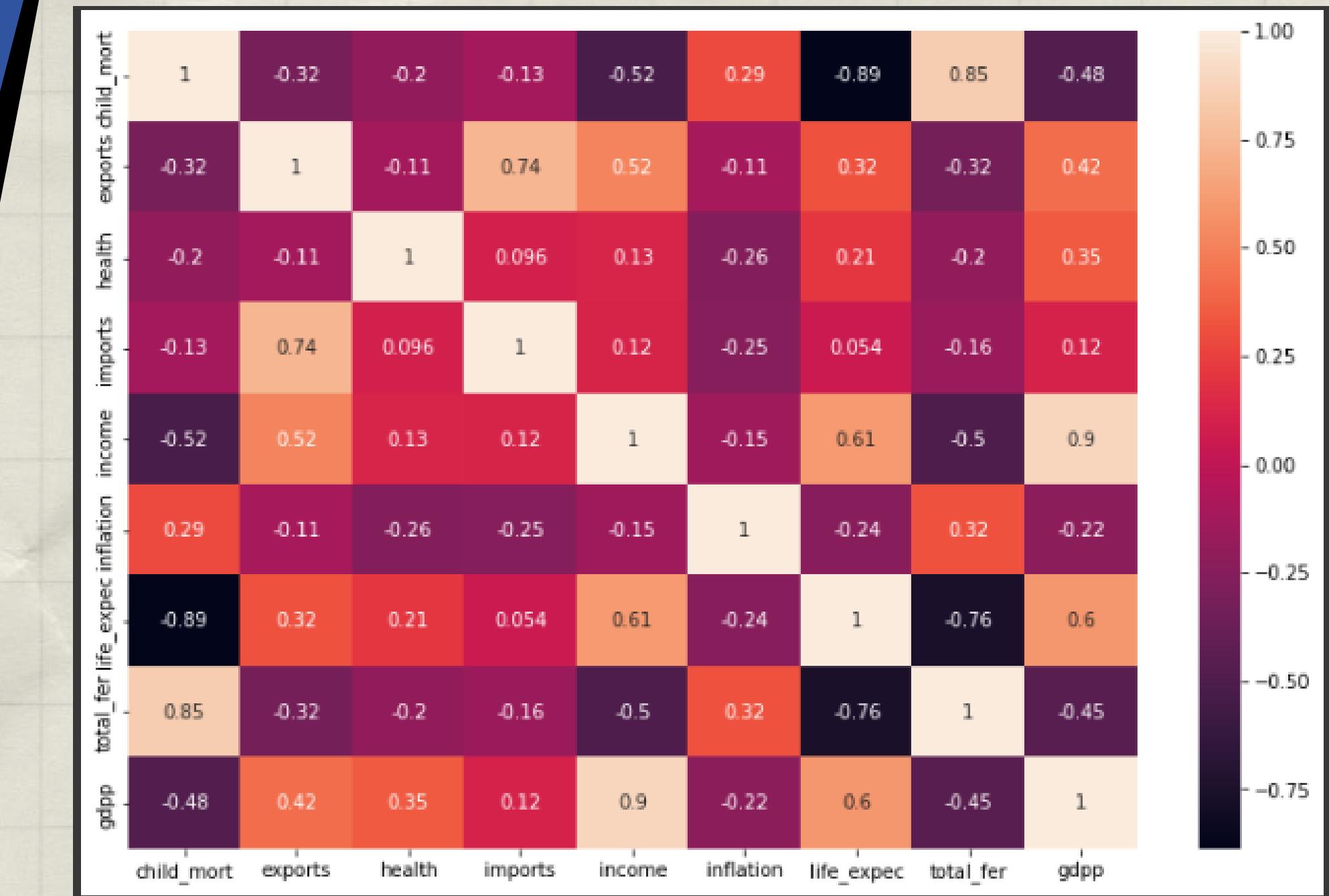
Bivariate

We performed bivariate to see the distribution of the relationship between 'life expectancy' and 'total fertility'.



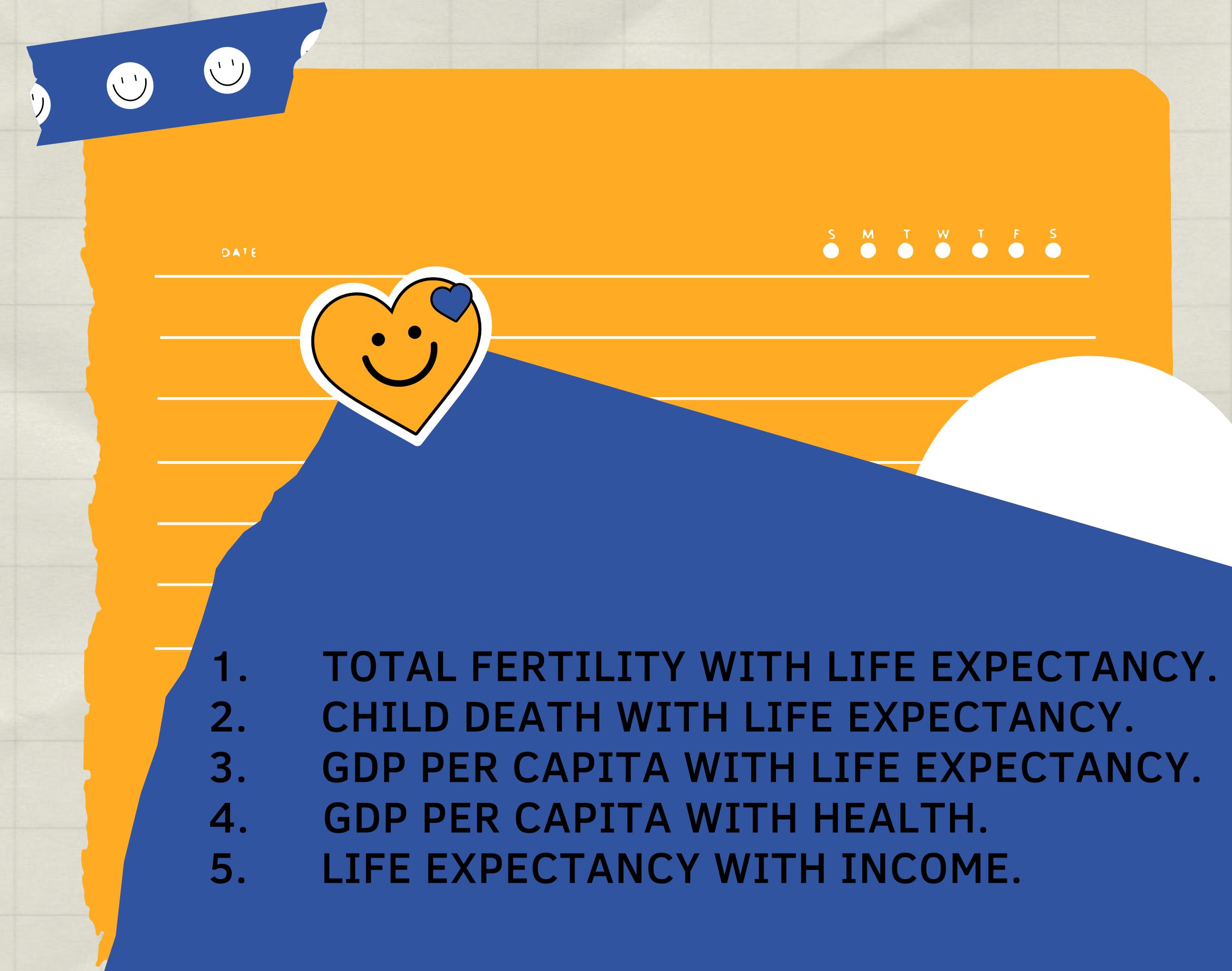
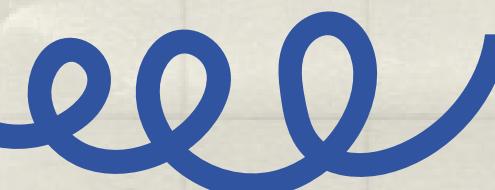
Multivariate Analysis

We multivariate to see the magnitude of the correlation value between columns



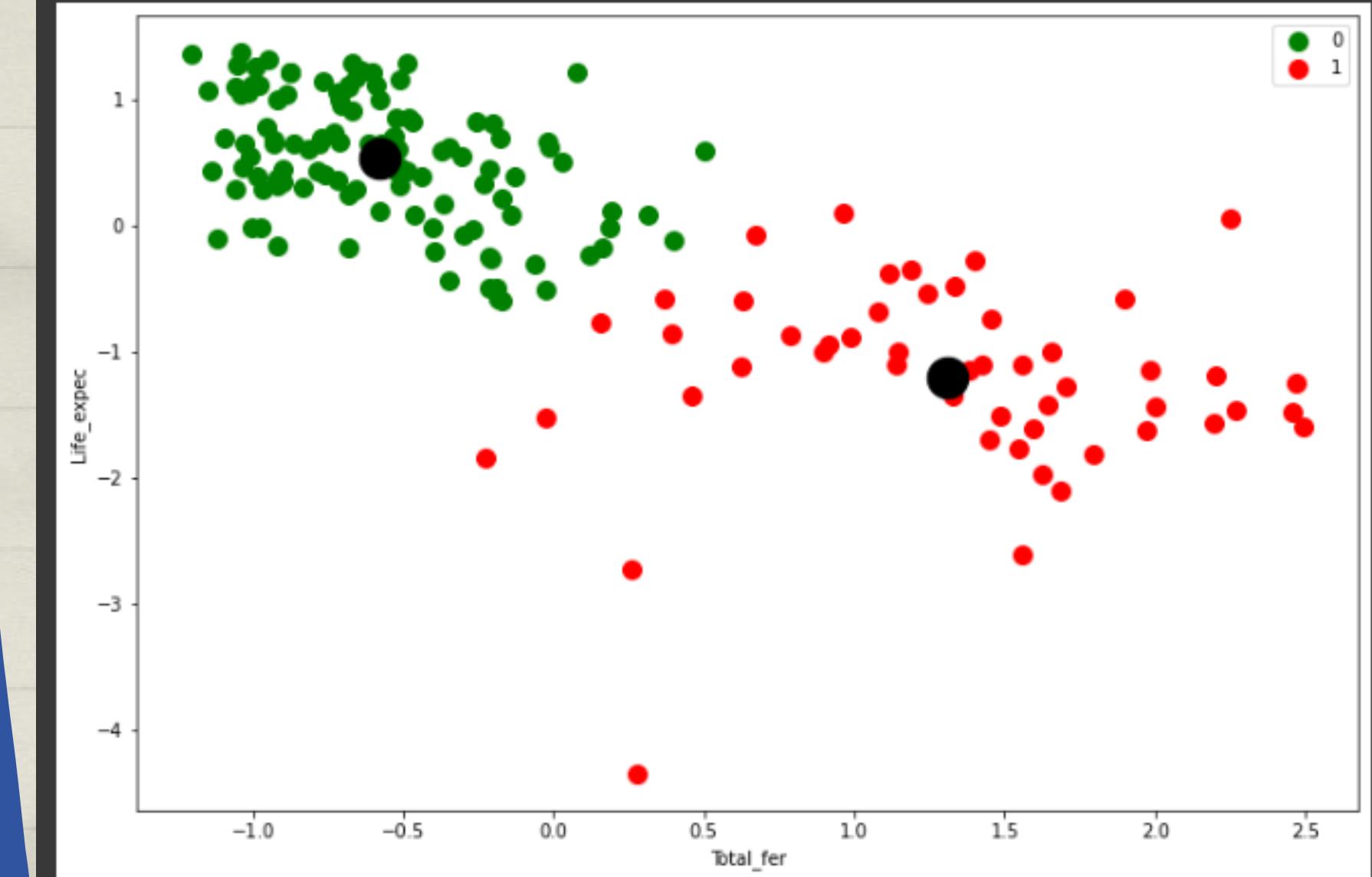
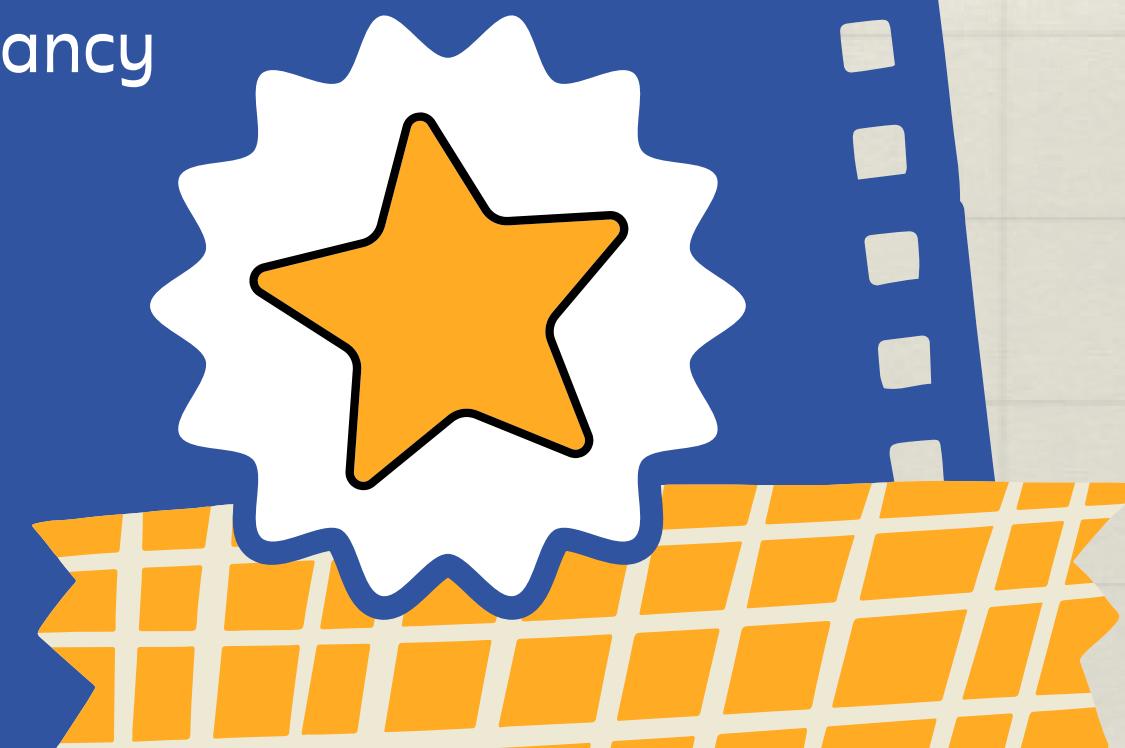
ANALYSIS PROCESS

AT THIS STAGE WE
CONDUCTED 5
ANALYZES WITH
CATEGORIZATION USING
K MEANS, NAMELY:



Analysis 1

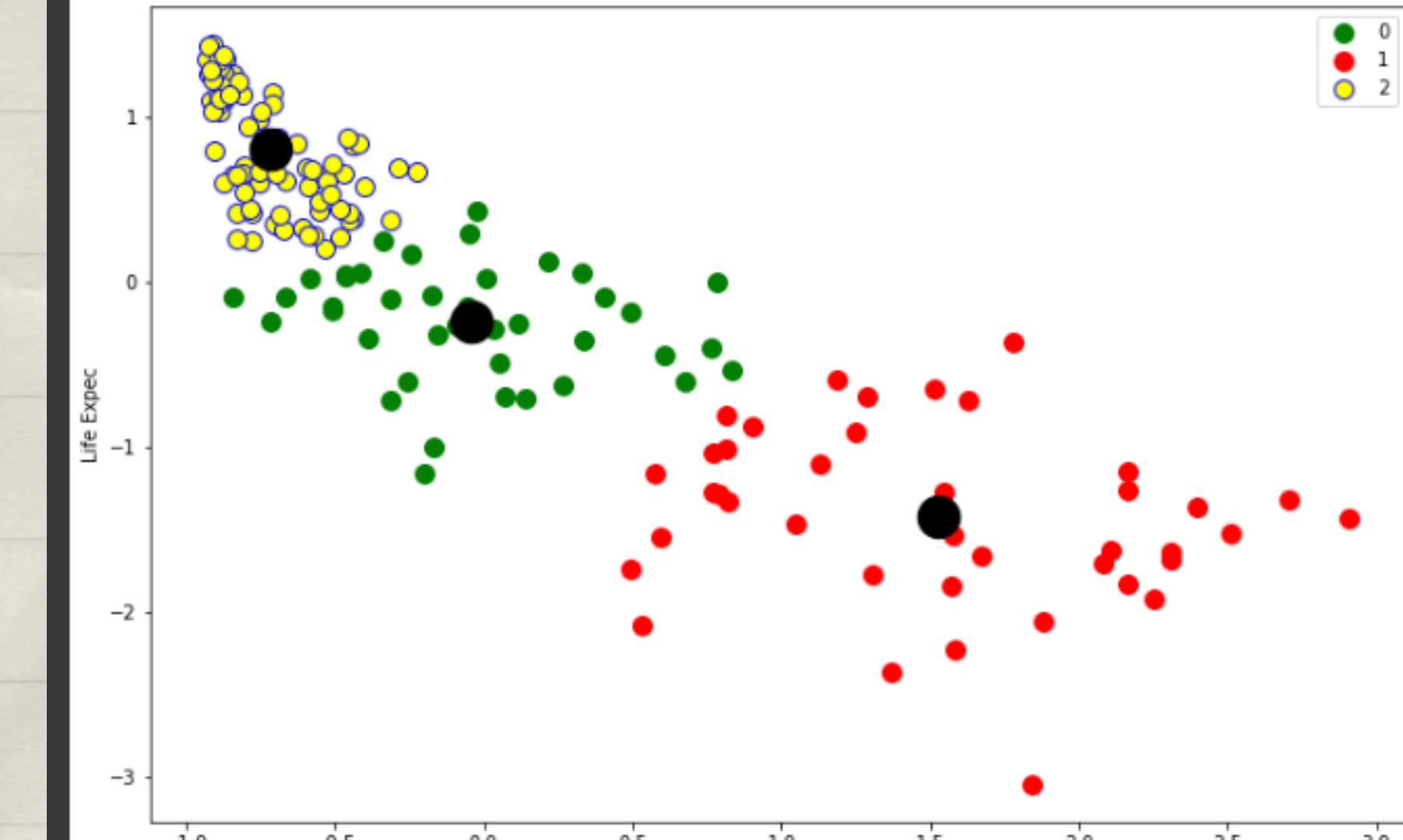
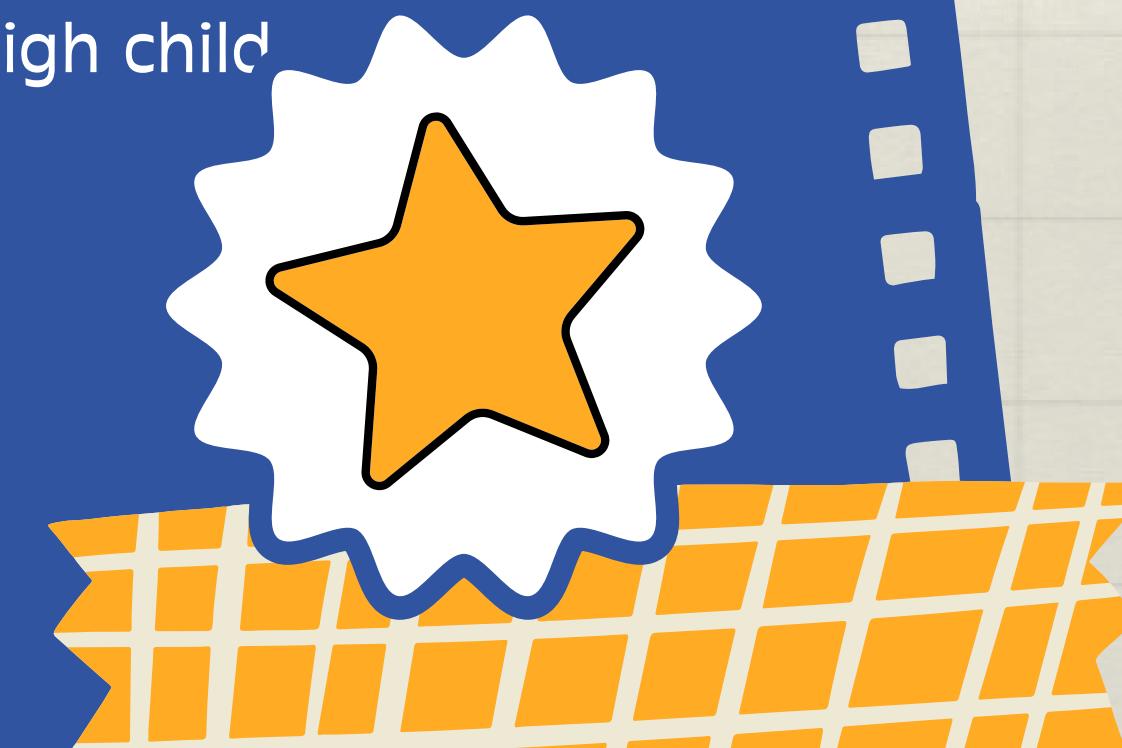
In analysis 1 we searched for the top 5 countries with low life expectancy by category of **total fertility with life expectancy**. Why?? Because in our opinion, countries with low life expectancy and high fertility rates are underdeveloped countries. By doing the process of removing outliers, data scaling, and categorizing Kmeans. Find 5 countries with low life expectancy



	country	life_expec
0	Haiti	32.1
1	Lesotho	46.5
2	Central African Republic	47.5
3	Malawi	53.1
4	Mozambique	54.5

Analysis 2

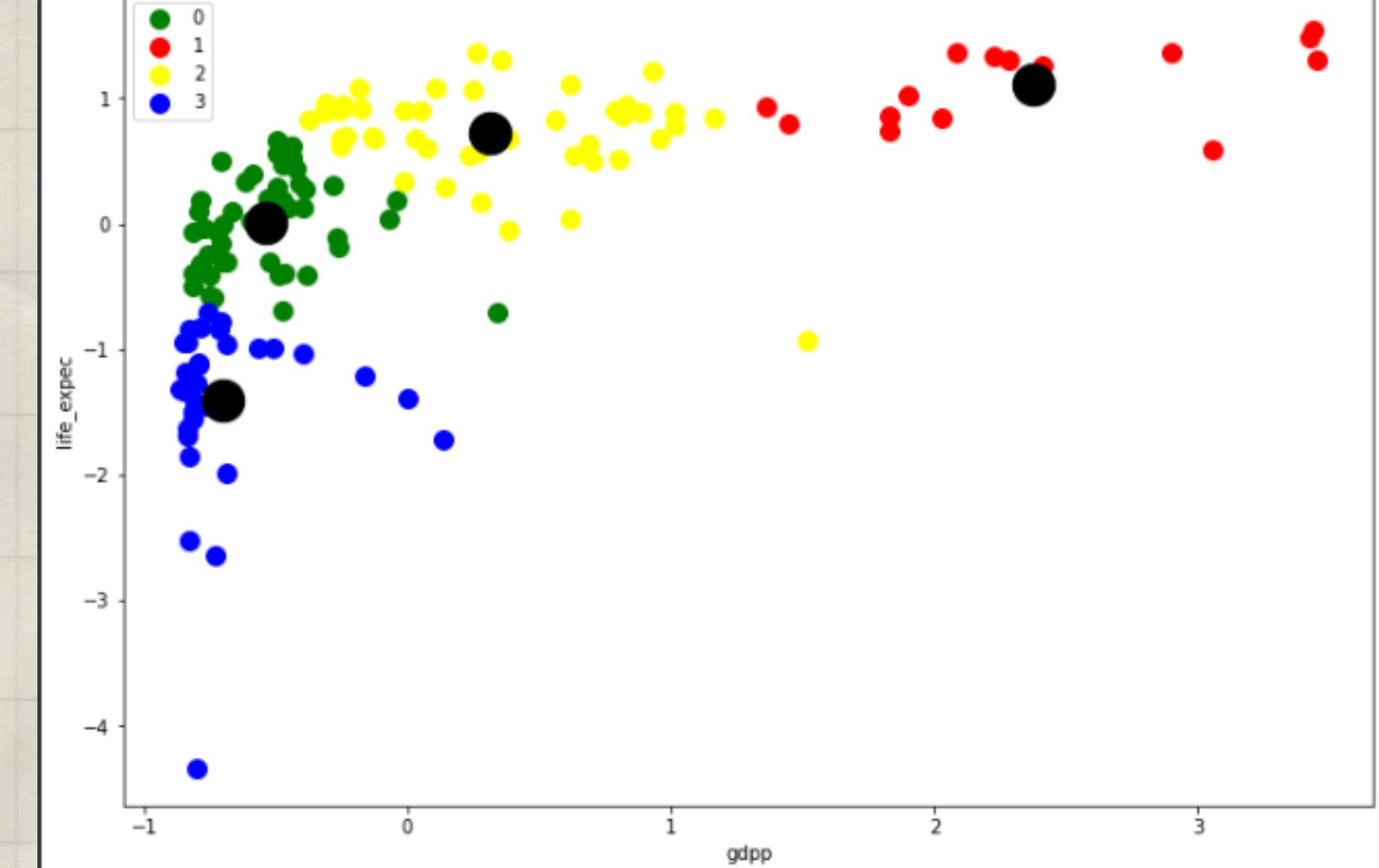
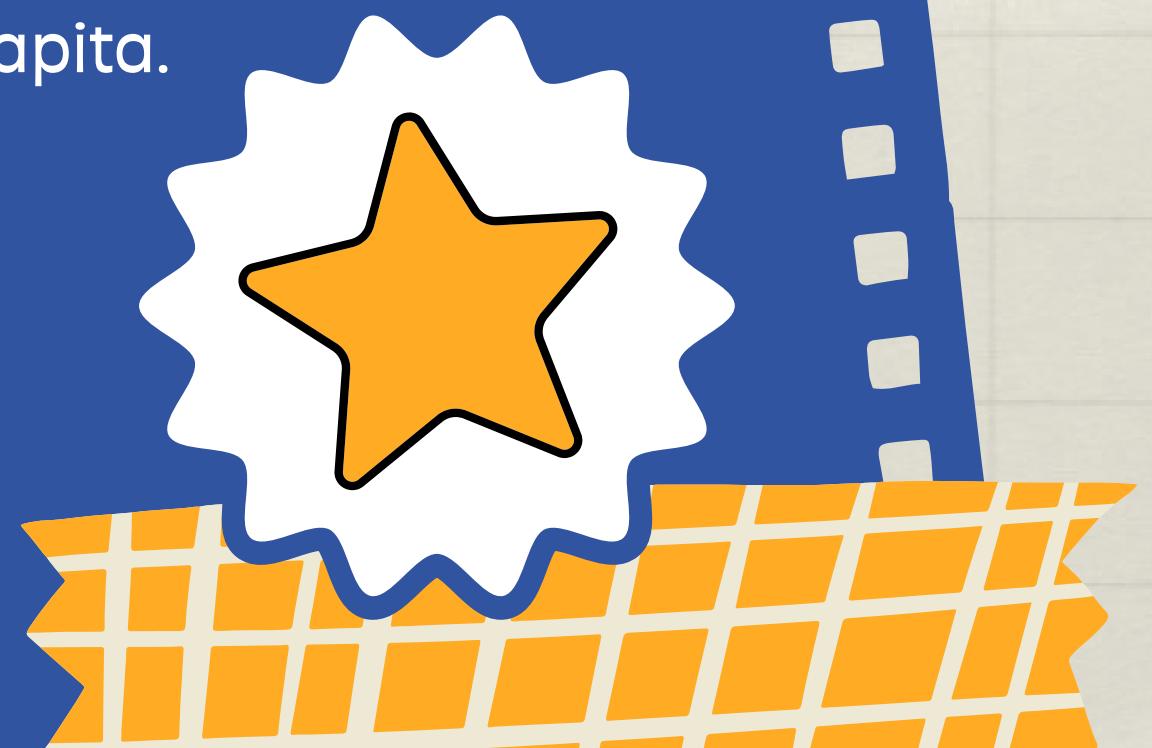
In this analysis 2 we searched for the top 5 countries with the highest child mortality by category of **child mortality with life expectancy**. Why?? Because in our opinion, a country with a low life expectancy and a large number of child deaths is an underdeveloped country. By doing the process of removing outliers, scaling data, and categorizing Kmeans. There are 5 countries with high child mortality.



	country	child_mort
0	Nigeria	130.0
1	Angola	119.0
2	Burkina Faso	116.0
3	Benin	111.0
4	Cameroon	108.0

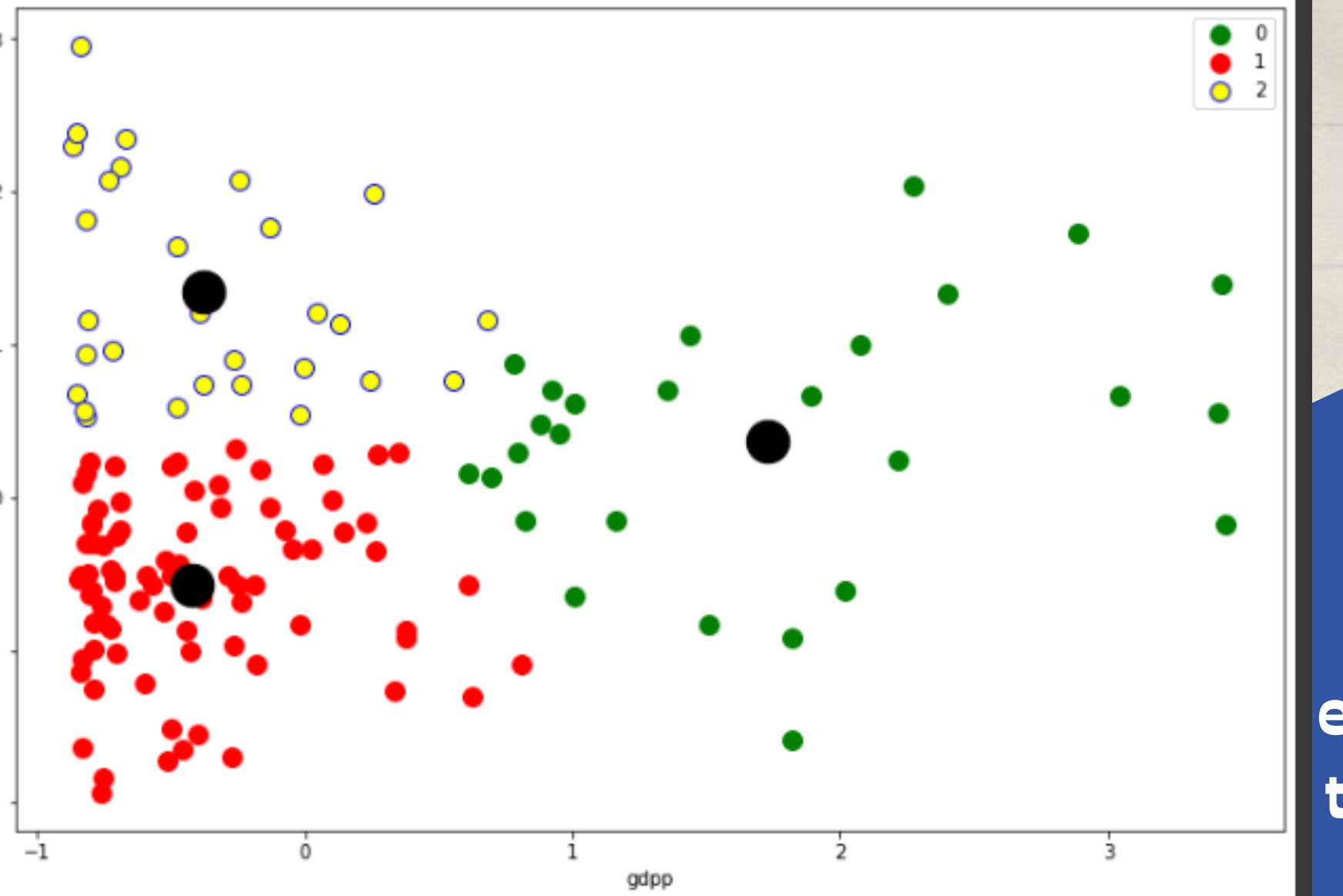
Analysis 3

In this analysis 3 we look for the top 5 countries with the lowest GDP per capita by category of GDP per capita by life expectancy. Why?? Because in our opinion, countries with low life expectancy and low GDP per capita are underdeveloped countries. By doing the process of removing outliers, scaling data, and categorizing Kmeans. There are 5 countries with low GDP per capita.



	country	gdpp
0	Burundi	231
1	Madagascar	413
2	Eritrea	482
3	Afghanistan	553
4	Cambodia	786

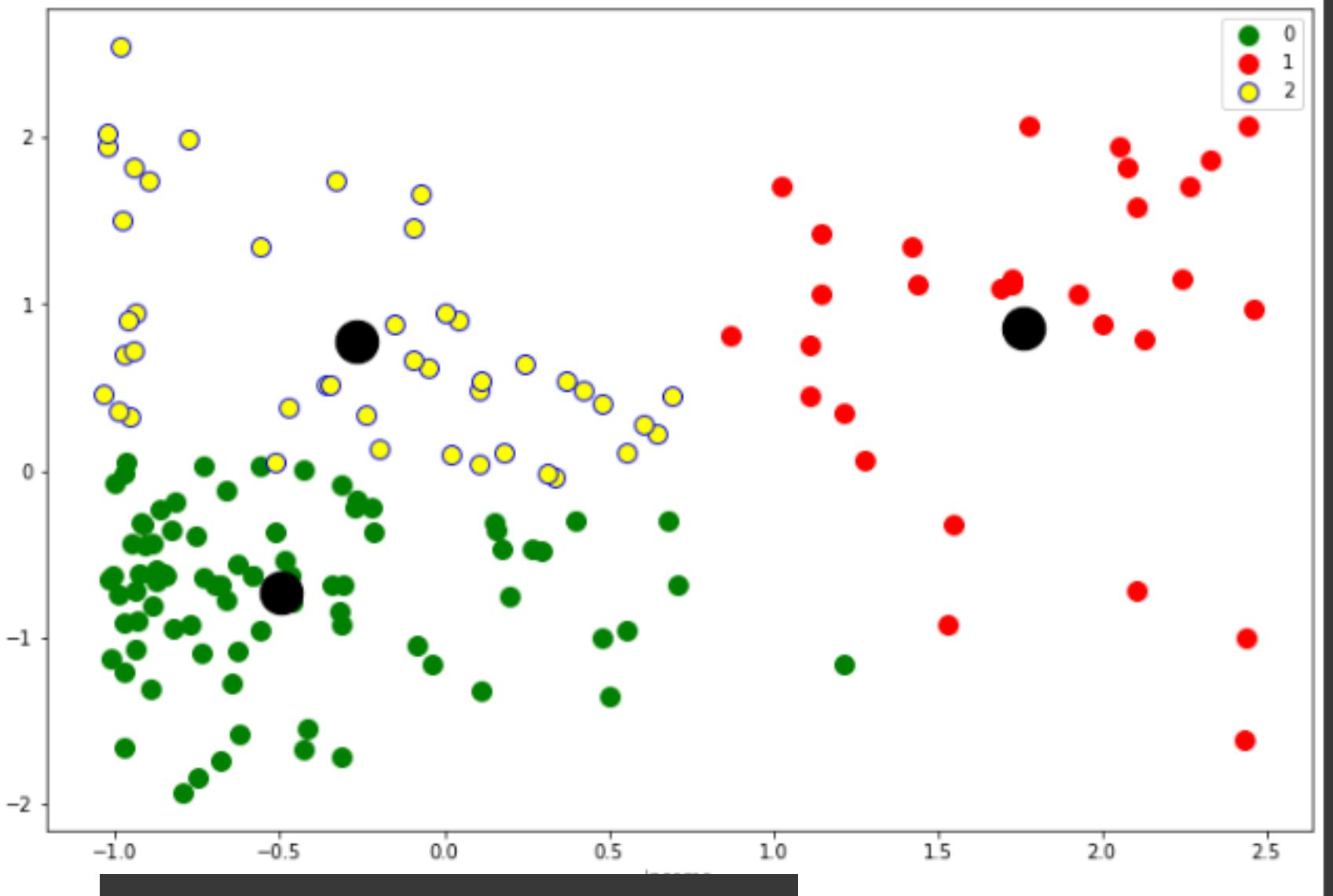
Analysis 4



	country	health
0	Sierra Leone	13.1
1	Netherlands	11.9
2	Liberia	11.8
3	Rwanda	10.5
4	Iceland	9.4

In this analysis 4 we look for the top 5 countries with the highest total health expenditure values by category of GDP per capita with health. Why?? Because in our opinion, countries with high health expenditures and low GDP per capita figures are likely to be underdeveloped countries. By doing the process of removing outliers, scaling data, and categorizing Kmeans. There are 5 countries with high health spending.

Analysis 5



country	income
0 Liberia	700
1 Niger	814
2 Guinea	1190
3 Togo	1210
4 Rwanda	1350

In this analysis 5 we look for the top 5 countries with low income scores by category of Income and Life Expectancy. Why?? Because in our opinion, countries with low income and low life expectancy are underdeveloped countries. By doing the process of removing outliers, scaling data, and categorizing Kmeans. There are 5 countries with low income.

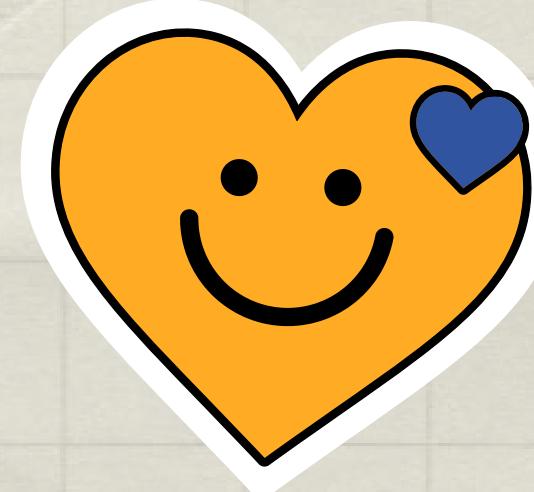
CONCLUSION

The conclusions we can draw from the results of our analysis are as follows.

The country most in dire need of assistance from the NGO HELP International of \$10 million is **CENTRAL AFRICA**. Because the country is in the top 5 in the category of countries with the lowest life expectancy and the lowest income, we think these two factors are strong factors to determine which countries need more social and economic support.



THANK YOU!



eee

