

# Curneu MedTech Innovations Assessment -Task 1

## MALNUTRITION ACROSS THE COUNTRIES

- MANOJ KUMAR P (1832032)

### **AIM:**

To perform the exploratory data analysis(EDA) in the given data and find useful insights in the data.

### **DESCRIPTION:**

Malnutrition is a condition that results from eating a diet in which one or more nutrients are either not enough or are too much such that the diet causes health problems. The factors of malnutrition is Severe Wasting, Overweight, Stunting, Underweight, Income Classification. Our aim is to draw useful insights from the given data

### **PROBLEM STATEMENT:**

Do an exploratory data analysis on the given datasets (country-wise-average.csv and malnutrition-estimates.csv) without using any in build packages and give insights from the data and plot the analysis which you done

#### MALNUTRITION:

Malnutrition is a condition that results from eating a diet in which one or more nutrients are either not enough or are too much such that the diet causes health problems.

- Wasting : Also known as 'acute malnutrition', wasting is characterised by a rapid deterioration in nutritional status over a short period of time in children under five years of age. Wasted children are at higher risk of dying.

- Stunting is the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation. Children are defined as stunted if their height-for-age is more than two standard deviations below the WHO Child Growth Standards median.

\* Severe Wasting - % of children aged 0–59 months who are below minus three standard deviations from median weight-for-height.

\* Wasting – Moderate and severe: % of children aged 0–59 months who are below minus two standard deviations from median weight-for-height

\* Overweight – Moderate and severe: % aged 0-59 months who are above two standard deviations from median weight-for-height

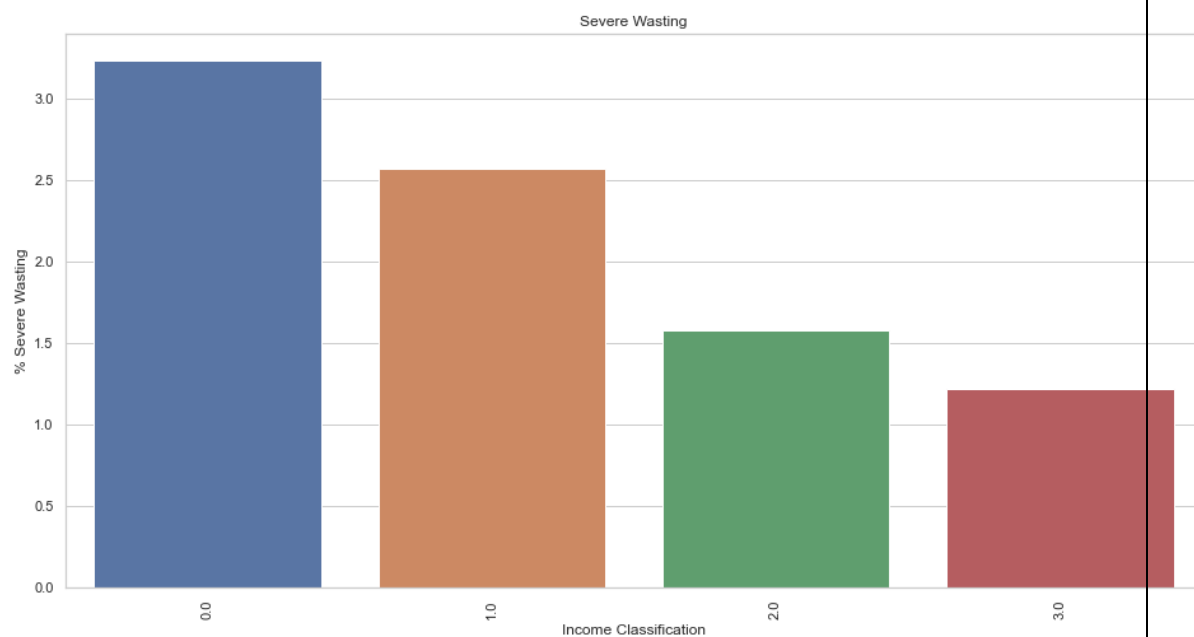
\* Stunting – Moderate and severe: % of children aged 0–59 months who are below minus two standard deviations from median height-for-age

\* Underweight – Moderate and severe: % of children aged 0–59 months who are below minus two standard deviations from median weight-for-age

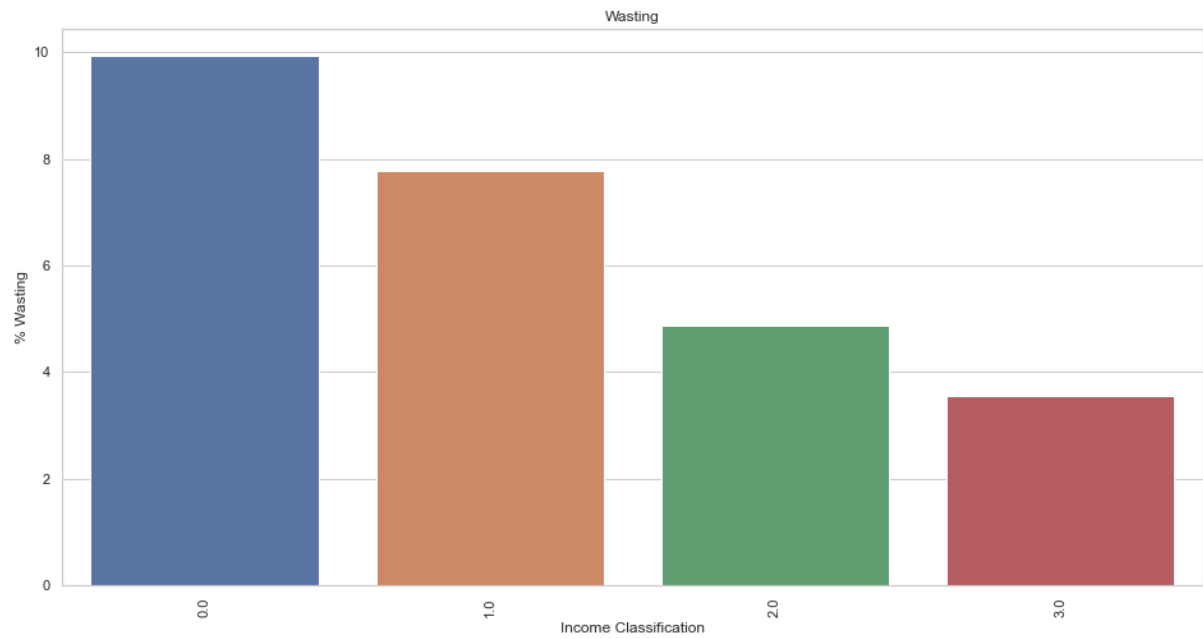
\* Income Classification - When it comes to income , the World Bank divides the world's economies into four income groups: high, upper-middle, lower-middle, and low. The income classification is based on a measure of national income per person, or GNI per capita, calculated using the Atlas method

## **PROBLEM APPROACH:**

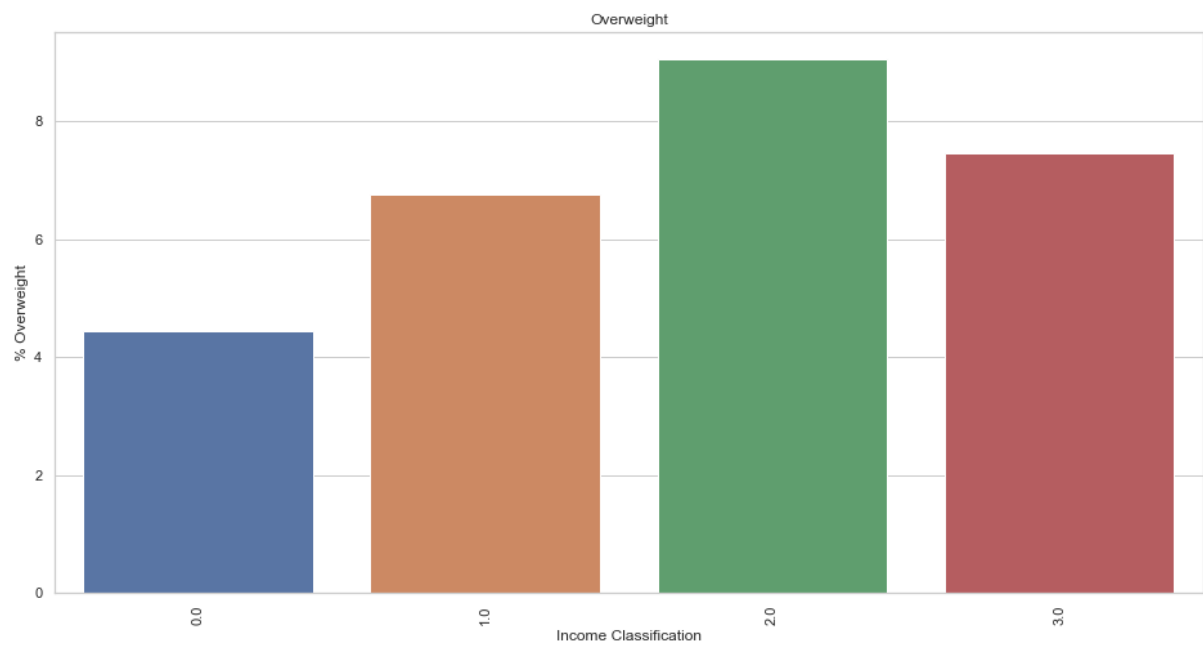
First using pandas package the data is read(country-wise-average.csv and malnutrition-estimates.csv) then descriptive statistics is done from scratch without using any package.



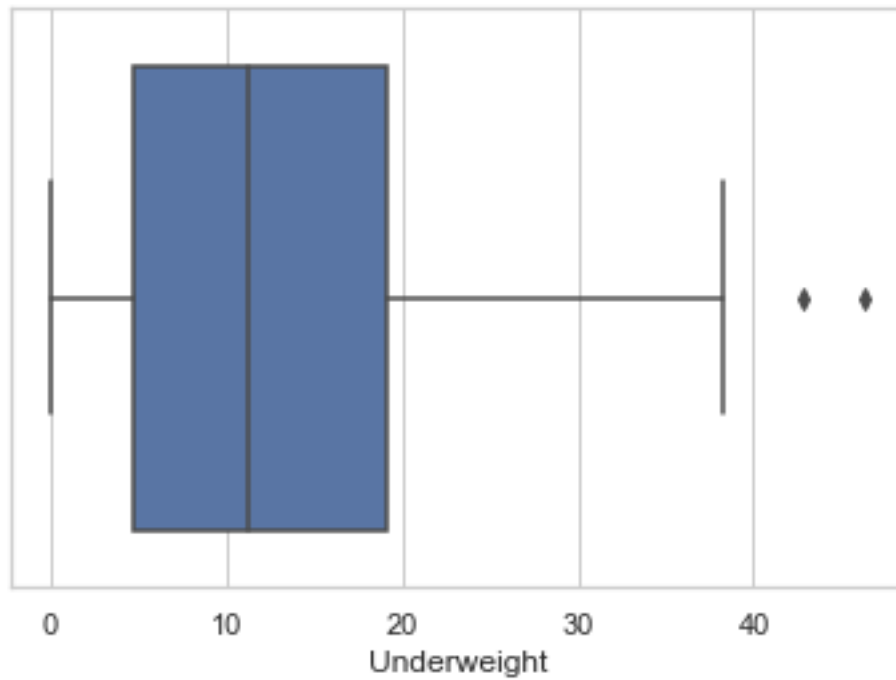
From this graph we can understand the value of severe wasting with respect to income\_classification



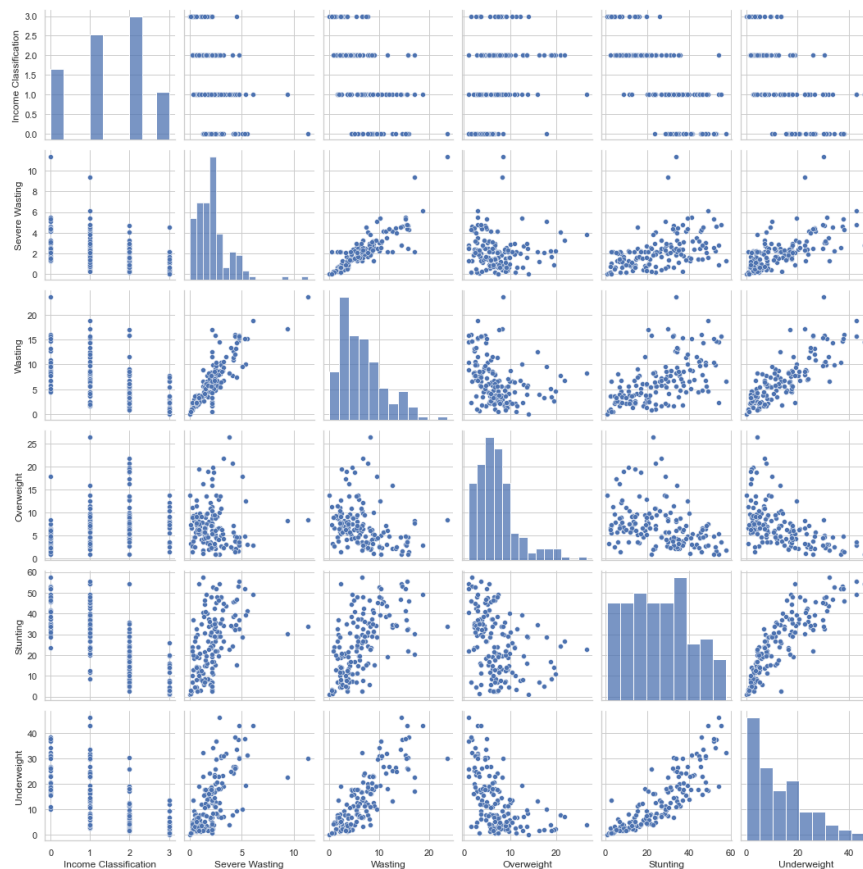
From this graph we can understand the value of wasting with respect to income\_classification



From this graph we can understand the value of overweight with respect to income\_classification



From this box plot we can whether the dataset has any outliers



From this graph we can see the attributes are not correlated to each other