

## **Machine Learning - Graded Assignment**

### **Problem Statement:**

The '**Life Expectancy**' **dataset** contains information about several health and economic factors that contribute to average life expectancy for different countries. It is our aim to study how these various factors impact the average life expectancy in the given countries.

### **Variable information:**

**Country:** Name of the country

**Status:** Whether the country is Developed or Developing

**Adult\_Mortality:** Mortality rate for age group 15-60 out of every 1000 individuals of the population

**Infant\_Deaths:** Number of infant deaths per 1000 population

**Hepatitis:** Hepatitis B (HepB) immunization coverage for 1-year olds (Percentage)

**Measles:** Number of reported cases for measles per 1000 from population

**BMI:** Average Body Mass Index for entire population

**Underfive\_Deaths:** Number of deaths under 5 years of age per 1000 population

**Polio:** Polio (Pol3) immunization coverage for 1-year olds (Percentage)

**Diphtheria:** Diphtheria tetanus toxoid and pertussis (DTP3) immunization coverage for 1-year olds (Percentage)

**HIV:** Deaths per 1000 live births due to HIV/AIDS (0-4 years)

**GDP:** Gross Domestic Product per capita (in USD)

**Population:** Population of the country

**Malnourished10\_19:** Prevalence of malnutrition among children and adolescents for Age 10 to 19 (Percentage)

**Malnourished5\_9:** Prevalence of malnutrition among children for Age 5 to 9 (Percentage)

**Income\_Index:** Human Development Index (HDI) in terms of national income per capita (index ranging from 0 to 1)

**Schooling:** Number of years of Schooling

**Life\_Expectancy:** Life Expectancy in age for the country

Build the full model, find the significant contributors and share the post model conclusions.