Columns:

1. \*\*Country\*\*: The name of the country where the data was recorded.

2. \*\*Year\*\*: The year in which the data was recorded.

3. \*\*Status\*\*: The development status of the country (e.g., Developing, Developed). This likely categorizes countries based on their economic and social development levels.

4. \*\*Adult Mortality\*\*: The probability of dying between the ages of 15 and 60 per 1000 population.

5. \*\*Infant Deaths\*\*: The number of infant deaths (under one year of age) per 1000 population.

6. \*\*Alcohol\*\*: Alcohol consumption measured in liters of pure alcohol per capita per year.

7. \*\*Percentage Expenditure\*\*: Expenditure on health as a percentage of total GDP.

8. \*\*Hepatitis B\*\*: Hepatitis B immunization coverage among 1-year-olds (in percentage).

9. \*\*Measles\*\*: Number of reported measles cases per 1000 population.

10. \*\*BMI (Body Mass Index)\*\*: The average Body Mass Index of the population.

11. \*\*Under-Five Deaths\*\*: Number of deaths of children under five years of age per 1000 live births.

12. \*\*Polio\*\*: Polio immunization coverage among 1-year-olds (in percentage).

13. \*\*Total Expenditure\*\*: Government expenditure on health as a percentage of total government expenditure.

14. \*\*Diphtheria\*\*: Diphtheria immunization coverage among 1-year-olds (in percentage).

15. \*\*HIV/AIDS\*\*: Deaths per 1000 live births caused by HIV/AIDS.

16. \*\*GDP (Gross Domestic Product)\*\*: The Gross Domestic Product per capita in US dollars.

17. \*\*Population\*\*: The population of the country.

18. \*\*Thinness 1-19 years\*\*: Prevalence of thinness among children and adolescents aged 10-19 (in percentage).

19. \*\*Thinness 5-9 years\*\*: Prevalence of thinness among children aged 5-9 (in percentage).

20. \*\*Income Composition of Resources\*\*: Human Development Index (HDI) indicating the income composition of resources in the country.

21. \*\*Schooling\*\*: Number of years of Schooling.

22. \*\*Life Expectancy\*\*: The average number of years a person can expect to live based on current mortality rates.

#### a. \*\*Linear Regression:\*\*

- Ensure features are linearly independent (no multicollinearity).

- Normalize or scale features if using regularization (e.g., Lasso or Ridge regression).

#### b. \*\*Decision Trees and Random Forests:\*\*

- Generally robust to feature scaling, but encoding categorical variables appropriately is crucial.

- Feature selection can be guided by tree-based feature importance.

#### c. \*\*Support Vector Machines (SVM):\*\*

- Scale features to have zero mean and unit variance (Standardization).

- Consider using nonlinear kernels for complex relationships.

#### d. \*\*Neural Networks:\*\*

- Standardize or normalize input features.

- Consider using techniques like Batch Normalization within the network architecture.

#### e. \*\*Regularized Regression (Lasso, Ridge):\*\*

- Features should be scaled due to the penalty terms applied to coefficients.