Week 4: Statistical Model Selection and Hypothesis Development

Project Topic

Analyzing the Impact of Inflation on Investing in Nepal

1. Chosen Statistical Model: Linear Regression

For our project, we selected Linear Regression as the main statistical model. This method is useful when we want to study the relationship between two or more variables.

In our case, we are trying to understand how inflation affects investment behavior in Nepal. Linear regression will help us check if there is a positive or negative relationship between the inflation rate and investment trends (such as stock market performance, savings interest, etc.).

We chose linear regression because:

- It is simple and easy to interpret.
- It works well with numerical data like inflation percentages.
- It helps to predict investment trends based on inflation values.

2. Selected Features (Independent Variables)

From the Nepal Rastra Bank Inflation Report 2079/80, we selected the following features for our model:

- Headline Inflation: General inflation percentage each month.
- Food Inflation: Change in prices of food items.
- Non-Food Inflation: Change in prices of non-food goods and services.

If additional investment data is included (e.g., stock market index like NEPSE), that will be our dependent variable.