Project Proposal - Group 4

➢ **Project Title** -

A Statistical Analysis on Monthly Rental Costs and Living Expenses of University Students

➢ **Description of the Idea** -

We hope to examine the monthly living expenses and rental costs of university students using statistical techniques by this project. This idea highlights the real financial challenges university students face today. Therefore, this project helps us know if living expenses are easy or hard for students to pay.

➢ **Objectives** -
● To identify the average monthly rental cost and living expenses
● To analyze the variability and distribution of rental and living expenses among students
● To investigate whether there is a significant difference in expenses based on factors such as gender, year of study, or type of boarding place.

➢ **Course Topics Covered** -
● We can do a comprehensive analysis of boarding student expenses using ***probability distributions, statistical inference, sampling distributions, and correlation and simple linear regression analysis.***
● It explores the patterns of expenses, test hypotheses, and examines the relationship between rental costs and living expenses.

➢ **Data Source** -
● We will gather information directly from boarding students who are studying in universities by asking them a set of prepared questions.(What is your university, what is your academic year, What is your faculty, How much do you pay for the monthly rent, Does your monthly rent include current bill & water bill if the answer is no How much do you pay for the current bill & water bill, How far is it from your boarding to the university, What is your average monthly expense of food & groceries, How much do you spend monthly on transportation etc.)
● We will gather information from previous surveys in this regard.(Google Scholar)

➢ **Proposed Statistical Methods** -
● Descriptive Statistics - mean, median, mode, variance, standard deviation
● Comparative Tests
● Correlation & Regression Analysis
● Data Visualization(Charts/Graphs)