# IST 1025 ASSIGNMENT 2

## Group 6: Personal Budget Calculator

Project Title: Personal Budget Calculator

Project Description: Develop a Personal Budget Calculator using Python. This project should allow users to manage their personal finances by tracking income, expenses, and savings goals. The system should provide functionality to add, categorize, and analyze expenses, set budget limits for different categories, and generate reports on spending habits and savings progress.

Objectives:

* Apply problem-solving techniques to design algorithms for expense tracking, budget planning, and financial analysis.
* Implement control structures (if/else, loops) and functions in Python.
* Utilize arrays or dictionaries to store financial data and budget limits.
* Understand and apply basic file processing techniques for storing and retrieving financial data.

Requirements:

* Algorithm Design: Before coding, the group must develop algorithms for adding, categorizing, and analyzing expenses, setting budget limits, and generating financial reports.
* Core Functionalities:
  + Expense Management: Functions to add new expenses, categorize expenses, and calculate total expenses.
  + Budget Planning: Implement functionality to set budget limits for different categories.
  + Financial Analysis: Generate reports showing expense details, spending patterns, and savings progress.
* User Interface: Develop a simple user interface to interact with the system, allowing users to perform various financial operations.
* Testing: Develop a basic test plan to ensure the correctness of the implemented functionalities.

Deliverables:

* Detailed algorithms for expense tracking, budget planning, and financial analysis.
* Well-documented Python code for the Personal Budget Calculator.
* User interface implementation.
* Test plan and report summarizing testing procedures and outcomes.