LAB 1: INTRODUCTION TO C PROGRAMMING

You are tasked with developing a program for the **University of Suffolk (UoS)** to help the graduation committee determine students eligible for graduation prizes. The program should collect student details, accept marks for 5 modules, calculate the final average grade, and determine if the student qualifies for a graduation prize. An award is given to a student(s) who get 1st as the final average mark. The university's grading system is as follows:

Percentage Range	Classification
0.0% - 39.4%	FAIL
39.5% - 49.4%	3rd
49.5% - 59.4%	2.2 (Lower Second-Class)
59.5% - 69.4%	2.1 (Upper Second-Class)
69.5% - 100%	1st (First-Class)

Your task is to automate this process for the committee.

REQUIREMENTS

Program Functionality:

- The program should prompt the user to enter a student's score.
- The program should output the names of the modules and corresponding mark. The program should also then output the final grade and state whether the student gets an award.
- Include error handling for invalid input (i.e., scores outside the range of 0 to 100). Make use of functions.

Git Integration:

- Initialize a Git repository.
- Commit changes at key points (after writing the program, after testing, etc.).
- Push the code to a GitHub repository.
- Share the GitHub repo with the lecturer. Use the submission link in BrightSpace

DISCUSSION

In doing this task, we categorised percentage ranges into classifications (e.g., FAIL, 1st, 2.1, 2.2). This relatively simple exercise highlights several key challenges that **data structures** are designed to solve, especially as the complexity of the data or its operations increases. Find out the different data structures which can be used in this context.