**Operating System**

**Graded lab:01**

**Question:**

Design and implement a console-based application using Visual Studio Code and C++ that serves as a student management system for a university. The system should allow users to input and manage student records, perform various operations, and display relevant information. Ensure that your program covers the following aspects:

**Data Type:**

Utilize appropriate data types for student information such as name, student ID, GPA, and enrollment year.

**Input/Output:**

Implement functions for user input to gather student information and display relevant details. Use formatted output for a clear presentation.

**Control Structures (If/Else/Switch):**

Employ control structures to manage menu options, allowing users to add new student records, update existing records, or view specific details based on user choices.

**Looping:**

Use loops to provide a user-friendly experience, allowing multiple operations until the user decides to exit the program.

**Functions with/without Parameters:**

Create modular functions to perform specific tasks such as adding new student records, updating information, and displaying student details. Some functions should take parameters for flexibility.

**Command Line Arguments:**

Allow the program to accept command-line arguments, enabling users to specify input files or other configuration options when launching the application.

**Dynamic Memory Allocation:**

Utilize dynamic memory allocation to handle student records, accommodating a variable number of students. Implement proper memory management to avoid memory leaks.

**Structures:**

Define a structure (e.g., Student) to organize and store student-related information. Use instances of this structure to represent individual students in the system.