## Project Title: Develop a course management application using Python.

## **Project Overview:**

It should contain the following information and features:

- Each course should have the information like course code, title of the course, course credit, and list of prerequisites (course code) of the course.
- Adding functionality: To add a new course.
- **Updating functionality:** To update an existing course.
- **Deleting functionality:** To delete an existing course.
- **All course display functionality:** To display information about all the courses.
- **Individual course display functionality:** To display all the information of a course.
- **Search functionality:** To search for a particular course and display the contents. If the course is not present in the application already, then prompt user to add the new course.
- **Prerequisite/main course checking functionality:** When you add the prerequisites of a new course, make sure the prerequisite course is already exists in the course list. That's why you should have a checking functionality when you are going for adding a new course or adding prerequisite of any course. If course is not exists, then prompt user to add the course first to add it as a prerequisite of a course, or as a main course.
- **Store functionality:** Finally, it should have a store functionality to store all the courses in the application into a text file if user wants to maintain a physical copy in his/her hard drive.

As this **application** would be a **console-based**, so first display a menu containing all the available options of the application, and then user will decide what he wants to do. User can exit from the application when he pressed "**quit**".

NB: Write and organize your code by following best practices approach.

## **Project Report:**

You have to submit a complete report mentioning everything regarding the project.

The project report should contain the following information:

- A standard cover page
- Project overview: Write details about the project
- Project solution design: Write how do you complete this project
- Implementation: Python code for the project
- Project Outcomes: Write the project outcome by mentioning all the functionality of the project with output (give screenshot for each of the functionality)

Remember that you have to submit printed version of your project report and face the viva to complete the project.