**TASK MANAGER APP : WRITEUP**

1. **Problem Statement.** To build a Task Manager that allows users to manage their tasks. The system should include user authentication, meaning each user has to log in with a username and password. Once logged in, users can create, view, update and delete their tasks. Each user’s tasks should be stored separately and only the authenticated user can access their tasks.
2. **Main Program.** Main program to register a new user, login and exit as per the choice of the individual.
3. **User Registration & Authentication.**
   1. **Registration**. A function that allows new user registration with a username and a password. Store the user credentials in a text file (new file is created in the local folder if the file does not exists). Password to be stored in hashed format.
   2. **Login**. Create a login function that authenticates users based on login credentials by comparing it with the users.txt file data. If the login credentials are correct then give message that the Login Successful.
   3. **Data Structure**.
      1. Store each user’s tasks in a file (tasks.txt) with each task containing following :-
         1. Task Description.
         2. Status of task (pending or completed).
         3. Unique Task ID.
4. **Create New Task.** Function to add a new task after login, task description and store it in the task file with respect to the user file.
5. **View Tasks.** Function that displays all tasks for the logged-in user.
6. **Task Updation.** Function to update/Mark the status of tasks (pending or completed).
7. **Task Deletion.** Function to delete a task based on Task ID.