

# Task Manager in python

The project aims to help users organize and manage their daily tasks in a simple and efficient way, with support for urgent tasks, completed tasks, and sorting tasks by priority or date. Object-oriented programming (OOP) and various data structures were used to achieve flexible and easily scalable performance.

### **Objectives**

- 1. Enable the user to add, view, and delete tasks
- 2. Sort tasks by priority or due date
- 3. Manage completed tasks separately
- 4. Handle urgent tasks using a queue
- **5.Provide a simple text-based interactive interface to access all functionalities**

#### **Data Structures Used:**

- List: To store the main tasks
- Linked List: To store completed tasks
- Queue (using deque): To store urgent tasks

(Object-Oriented Programming ) OOP:

- Task class: Represents each task
- LinkedList and Node classes: Represent completed tasks
- TaskManager class: Manages all operations (add, delete, (sort, display)

## **Project Functions**

- **♣** Add a new task.
- **♣** Display all tasks.
- **♣** Delete a task.
- **♣** Sort tasks by priority.
- **♣** Sort tasks by date.
- **♣** Complete a task and move it to the completed tasks list.
- **♣** Display completed tasks.
- **4** Add an urgent task.
- Display urgent tasks.

#### **Conclusion:**

The project provides a simple and flexible tool for managing daily tasks using Python and OOP, with future scalability to add features such as a graphical user interface, task saving to files, or time-based reminders

# result



