

Description:

You are to create a basic task manager application. The application will allow users to:

1. **Add a task:** Users should be able to input a task description and a priority level (High, Medium, Low).
2. **View tasks:** Users should be able to view all tasks, optionally filtered by priority.
3. **Mark a task as completed:** Users can mark a task as completed using its index.
4. **List completed tasks:** Users can view all completed tasks.
5. **Save and load tasks:** The task list should be saved to a file (tasks.json) and loaded from it when the application starts.

Input/Output:

- The program should interact with the user via the console.
- Tasks should be stored in a JSON file named tasks.json.
- The program should provide a menu with options for the user.
- The program should handle user input errors gracefully.

Marking Scheme:

- **20% - Task Class (task.py):**
 - Correct implementation of the Task class with description, priority, and completed attributes.
 - Implementation of mark_completed and __str__ methods.
- **40% - Task Manager (task_manager.py):**

- Correct implementation of `add_task`, `view_tasks`, `mark_task_completed`, and `view_completed_tasks` methods.
 - Correct implementation of `save_tasks` and `load_tasks` using JSON.
 - Error handling for file operations (e.g., `FileNotFoundError`, `JSONDecodeError`).
- **30% - User Interface (`main.py`):**
 - Clear and user-friendly menu.
 - Correct handling of user input.
 - Proper integration with the `TaskManager` class.
 - Error handling for user inputs.
- **10% - Code Quality:**
 - Readability, comments, and proper code structure.
 - Adherence to Python coding conventions.
 - No major syntax errors.