**📝 Project Report: Python To-Do List Application**

**1. Title**

**Command-Line Based To-Do List Application in Python**

**2. Objective**

The objective of this project is to create a simple and efficient command-line based To-Do List Manager using Python that helps users keep track of tasks by allowing them to add, view, update, complete, and delete tasks with additional features such as due date, description, and priority.

**3. Tools & Technologies Used**

* **Language:** Python 3
* **Library:** datetime (for due date validation)
* **IDE/Editor:** Visual Studio Code

**4. Key Features Implemented**

**✅ Basic Functionality:**

* **Add Task:** Input title, description, due date, and priority level.
* **View Tasks:** Display task details along with completion status.
* **Update Task:** Modify any field of an existing task.
* **Mark as Completed:** Update the status of a task to completed.
* **Delete Task:** Remove a task permanently from the list.

**🕒 Date Validation:**

* Uses the datetime module to validate user input for due date (YYYY-MM-DD).

## 5. ****Working Methodology****

The application works in a loop that displays a menu and prompts the user to choose an action. Based on the user's selection, it performs the corresponding task management function until the user chooses to exit.

**6. Sample Output**

📋 TO-DO LIST MENU

1. View Tasks

2. Add Task

3. Update Task

4. Mark Task as Completed

5. Delete Task

6. Exit

**7. Conclusion**

This To-Do List project showcases the use of Python for building real-world utilities using basic programming constructs. It helped reinforce the concepts of list management, functions, user input validation, and structured programming.