**TASK – 1**

**TO - DO LIST**

A To-Do List application is a useful project that helps users manage and organize their tasks efficiently. This project aims to create a command-line or GUI-based application using Python, allowing -

users to create, update, and track their to-do lists

**Code:-**

class ToDoList:

def \_\_init\_\_(self):

self.tasks = []

def add\_task(self, task):

self.tasks.append({"task": task, "completed": False})

def view\_tasks(self):

if not self.tasks:

print("Your to-do list is empty.")

else:

for idx, task in enumerate(self.tasks):

status = "Done" if task["completed"] else "Not Done"

print(f"{idx + 1}. {task['task']} [{status}]")

def complete\_task(self, task\_index):

if 0 <= task\_index < len(self.tasks):

self.tasks[task\_index]["completed"] = True

else:

print("Invalid task number.")

def delete\_task(self, task\_index):

if 0 <= task\_index < len(self.tasks):

self.tasks.pop(task\_index)

else:

print("Invalid task number.")

def main():

todo\_list = ToDoList()

while True:

print("\nTo-Do List Options:")

print("1. Add task")

print("2. View tasks")

print("3. Complete task")

print("4. Delete task")

print("5. Exit")

choice = input("Choose an option (1/2/3/4/5): ")

if choice == '1':

task = input("Enter the task: ")

todo\_list.add\_task(task)

print("Task added.")

elif choice == '2':

todo\_list.view\_tasks()

elif choice == '3':

task\_index = int(input("Enter the task number to mark as complete: ")) - 1

todo\_list.complete\_task(task\_index)

print("Task marked as complete.")

elif choice == '4':

task\_index = int(input("Enter the task number to delete: ")) - 1

todo\_list.delete\_task(task\_index)

print("Task deleted.")

elif choice == '5':

print("Exiting the application.")

break

else:

print("Invalid choice. Please choose a valid option.")

# Run the main function

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Explaination:-**

1. **ToDoList Class**:
   * \_\_init\_\_: Initializes an empty list to store tasks.
   * add\_task: Adds a new task to the list.
   * view\_tasks: Displays all tasks with their status (Done/Not Done).
   * complete\_task: Marks a specific task as complete based on the task index.
   * delete\_task: Removes a specific task from the list based on the task index.
2. **Main Function**:
   * Provides a menu for the user to choose different options: add a task, view tasks, complete a task, delete a task, or exit.
   * Uses a while loop to keep the application running until the user chooses to exit.