**Name: Usman Ul Haq**

**Roll# BSAIM-035**

**AI LAB TASKs**

**LAB 1 TASK:**

Mini projects (any 1):

1. To Do list (Dynamic)

Code:

class ToDoList:

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

self.tasks = []

def add\_task(self, task):

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

print(f"Task '{task}' added to the to-do list.")

def view\_tasks(self):

if not self.tasks:

print("No tasks in the to-do list.")

else:

print("To-Do List:")

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

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

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

def mark\_task\_completed(self, task\_number):

if 1 <= task\_number <= len(self.tasks):

self.tasks[task\_number - 1]["completed"] = True

print(f"Task '{self.tasks[task\_number - 1]['task']}' marked as completed.")

else:

print("Invalid task number.")

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

if 1 <= task\_number <= len(self.tasks):

removed\_task = self.tasks.pop(task\_number - 1)

print(f"Task '{removed\_task['task']}' deleted from the to-do list.")

else:

print("Invalid task number.")

todo\_list = ToDoList()

todo\_list.add\_task("Buy groceries")

todo\_list.add\_task("Finish the report")

todo\_list.add\_task("Call the plumber")

todo\_list.view\_tasks()

todo\_list.mark\_task\_completed(1)

todo\_list.view\_tasks()

todo\_list.delete\_task(2)

todo\_list.view\_tasks()

**OutPut**

Task 'Buy groceries' added to the to-do list.

Task 'Finish the report' added to the to-do list.

Task 'Call the plumber' added to the to-do list.

To-Do List:

1. Buy groceries - Not Completed

2. Finish the report - Not Completed

3. Call the plumber - Not Completed

Task 'Buy groceries' marked as completed.

To-Do List:

1. Buy groceries - Completed

2. Finish the report - Not Completed

3. Call the plumber - Not Completed

Task 'Finish the report' deleted from the to-do list.

To-Do List:

1. Buy groceries - Completed

2. Call the plumber - Not Completed