// Start of the program

FUNCTION main()

CONNECT to database

LOOP

DISPLAY Main Menu:

1. View Tasks

2. Add Task

3. Edit Task

4. Delete Task

5. Exit

GET userChoice

IF userChoice == 1 THEN

CALL viewTasks()

ELSE IF userChoice == 2 THEN

CALL addTask()

ELSE IF userChoice == 3 THEN

CALL editTask()

ELSE IF userChoice == 4 THEN

CALL deleteTask()

ELSE IF userChoice == 5 THEN

BREAK LOOP

ELSE

DISPLAY "Invalid option. Please try again."

END LOOP

DISCONNECT from database

DISPLAY "Goodbye!"

END FUNCTION

// View all tasks

FUNCTION viewTasks()

tasks = DATABASE.GET\_ALL\_TASKS()

IF tasks IS EMPTY THEN

DISPLAY "No tasks found."

ELSE

FOR EACH task IN tasks

DISPLAY task.id + " | " + task.title + " | " + task.dueDate + " | " + task.status

END FOR

END IF

END FUNCTION

// Add a new task

FUNCTION addTask()

GET user input for title, description, dueDate

// Optionally call API for additional info (e.g., due date recommendation or priority)

extraInfo = CALL apiHelper.getTaskSuggestions(title, description)

newTask = {

title: title,

description: description,

dueDate: dueDate,

status: "Incomplete",

suggestions: extraInfo

}

DATABASE.INSERT\_TASK(newTask)

DISPLAY "Task added successfully."

END FUNCTION

// Edit an existing task

FUNCTION editTask()

CALL viewTasks()

GET taskId from user

task = DATABASE.GET\_TASK\_BY\_ID(taskId)

IF task IS NULL THEN

DISPLAY "Task not found."

RETURN

END IF

DISPLAY "Leave field blank to keep current value."

GET newTitle, newDescription, newDueDate, newStatus from user

IF newTitle IS NOT EMPTY THEN task.title = newTitle

IF newDescription IS NOT EMPTY THEN task.description = newDescription

IF newDueDate IS NOT EMPTY THEN task.dueDate = newDueDate

IF newStatus IS NOT EMPTY THEN task.status = newStatus

DATABASE.UPDATE\_TASK(task)

DISPLAY "Task updated."

END FUNCTION

// Delete a task

FUNCTION deleteTask()

CALL viewTasks()

GET taskId from user

CONFIRM deletion

IF user confirms THEN

DATABASE.DELETE\_TASK(taskId)

DISPLAY "Task deleted."

ELSE

DISPLAY "Task not deleted."

END IF

END FUNCTION

// Simulated API helper (mocked for pseudocode)

MODULE apiHelper

FUNCTION getTaskSuggestions(title, description)

// Call external API

response = API.CALL("https://example.com/taskinfo", {title, description})

RETURN response.suggestions

END FUNCTION

END MODULE