

**Problem Statement:-** Build a simple console-based to-do list manager that allows users to add, view, and delete tasks. **Task Input:** Allow users to input tasks they want to add to the list. **Add Task:** Implement a function to add tasks to the list. **View Tasks:** Display the list of tasks with their status (completed or pending). **Mark Task as Completed:** Allow users to mark tasks as completed. **Remove Task:** Provide an option to remove tasks from the list.

```
#include <iostream>
#include <vector>
#include <string>

using namespace std;

vector<pair<string, bool>> tasks;

void addTask() {
    string task;
    cout << "Enter task to add: ";
    getline(cin, task);
    tasks.push_back({task, false});
    cout << "Task added successfully!\n";
}

void viewTasks() {
    cout << "Your to-do list:\n";
    for (int i = 0; i < tasks.size(); i++) {
        cout << i + 1 << ". " << tasks[i].first;
        cout << (tasks[i].second ? " (completed)\n" : "
(pending)\n");
    }
}

void markTaskCompleted() {
    int taskIndex;
    cout << "Enter the task number to mark as completed: ";
    cin >> taskIndex;
    if (taskIndex >= 1 && taskIndex <= tasks.size()) {
        tasks[taskIndex - 1].second = true;
        cout << "Task marked as completed!\n";
    } else {
        cout << "Invalid task number\n";
    }
}

void removeTask() {
    int taskIndex;
    cout << "Enter the task number to remove: ";
    cin >> taskIndex;
```

```

    if (taskIndex >= 1 && taskIndex <= tasks.size()) {
        tasks.erase(tasks.begin() + taskIndex - 1);
        cout << "Task removed successfully!\n";
    } else {
        cout << "Invalid task number\n";
    }
}

int main() {
    int choice;
    do {
        cout << "\nTo-Do List Manager\n";
        cout << "1. Add Task\n";
        cout << "2. View Tasks\n";
        cout << "3. Mark Task as Completed\n";
        cout << "4. Remove Task\n";
        cout << "5. Exit\n";
        cout << "Enter your choice: ";
        cin >> choice;

        switch (choice) {
            case 1:
                addTask();
                break;
            case 2:
                viewTasks();
                break;
            case 3:
                markTaskCompleted();
                break;
            case 4:
                removeTask();
                break;
            case 5:
                cout << "Exiting...\n";
                break;
            default:
                cout << "Invalid choice\n";
        }
    } while (choice != 5);

    return 0;
}

```

