

todoaman.py

```
1 class Task:
2     def __init__(self, title, description):
3         self.title = title
4         self.description = description
5         self.completed = False
6
7     def mark_completed(self):
8         self.completed = True
9
10    def __str__(self):
11        status = "✓" if self.completed else "X"
12        return f"[{status}] {self.title}: {self.description}"
13
14
15 class ToDoList:
16     def __init__(self):
17         self.tasks = []
18
19     def add_task(self, title, description):
20         task = Task(title, description)
21         self.tasks.append(task)
22         print(f"Task '{title}' added.")
23
24     def update_task(self, index, title=None, description=None):
25         if 0 <= index < len(self.tasks):
26             if title:
27                 self.tasks[index].title = title
28             if description:
29                 self.tasks[index].description = description
30             print(f"Task {index + 1} updated.")
31         else:
32             print("Invalid task index.")
33
34     def mark_task_completed(self, index):
35         if 0 <= index < len(self.tasks):
36             self.tasks[index].mark_completed()
37             print(f"Task {index + 1} marked as completed.")
38         else:
39             print("Invalid task index.")
40
41     def display_tasks(self):
42         if not self.tasks:
43             print("No tasks available.")
44         else:
45             for i, task in enumerate(self.tasks):
46                 print(f"{i + 1}. {task}")
47
48
```

```
49 def main():
50     todo_list = ToDoList()
51
52     while True:
53         print("\nTo-Do List Application")
54         print("1. Add Task")
55         print("2. Update Task")
56         print("3. Mark Task Completed")
57         print("4. Display Tasks")
58         print("5. Exit")
59
60         choice = input("Choose an option: ")
61
62         if choice == '1':
63             title = input("Enter task title: ")
64             description = input("Enter task description: ")
65             todo_list.add_task(title, description)
66
67         elif choice == '2':
68             todo_list.display_tasks()
69             index = int(input("Enter task number to update: ")) - 1
70             title = input("Enter new task title (leave blank to keep current): ")
71             description = input("Enter new task description (leave blank to keep current): ")
72             todo_list.update_task(index, title if title else None, description if description
else None)
73
74         elif choice == '3':
75             todo_list.display_tasks()
76             index = int(input("Enter task number to mark as completed: ")) - 1
77             todo_list.mark_task_completed(index)
78
79         elif choice == '4':
80             todo_list.display_tasks()
81
82         elif choice == '5':
83             print("Exiting the application.")
84             break
85
86         else:
87             print("Invalid choice. Please try again.")
88
89
90 if __name__ == "__main__":
91     main()
92
```