

```
import json
```

```
import os
```

```
class ToDoList:
```

```
    def __init__(self, filename='to_do_list.json'):
```

```
        self.filename = filename
```

```
        self.load_tasks()
```

```
    def load_tasks(self):
```

```
        if os.path.exists(self.filename):
```

```
            with open(self.filename, 'r') as file:
```

```
                self.tasks = json.load(file)
```

```
        else:
```

```
            self.tasks = []
```

```
    def save_tasks(self):
```

```
        with open(self.filename, 'w') as file:
```

```
            json.dump(self.tasks, file, indent=4)
```

```
    def add_task(self, task):
```

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

```
        self.save_tasks()
```

```
    def update_task(self, task_number, new_task):
```

```
        if 0 <= task_number < len(self.tasks):
```

```
        self.tasks[task_number]['task'] = new_task

        self.save_tasks()

    else:

        print("Task number out ranged.")


def delete_task(self, task_number):

    if 0 <= task_number < len(self.tasks):

        del self.tasks[task_number]

        self.save_tasks()

    else:

        print("Task number out ranged.")


def complete_task(self, task_number):

    if 0 <= task_number < len(self.tasks):

        self.tasks[task_number]['completed'] = True

        self.save_tasks()

    else:

        print("Task number out ranged.")


def show_tasks(self):

    if not self.tasks:

        print("No tasks in the list.")

    else:

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

            task_status = "Completed" if task['completed'] else "Pending"
```

```
print(f"{idx + 1}. {task['task']} - {task_status}")
```

```
def main():
```

```
    to_do_list = ToDoList()
```

```
    while True:
```

```
        print("\nTo-Do List Application")
```

```
        print("1. Add a Task")
```

```
        print("2. Update the Task")
```

```
        print("3. Delete the added Task")
```

```
        print("4. Complete the Task")
```

```
        print("5. Show the Tasks")
```

```
        print("6. Exit")
```

```
    choice = input("Enter your choice: ")
```

```
    if choice == '1':
```

```
        task = input("Enter the task: ")
```

```
        to_do_list.add_task(task)
```

```
    elif choice == '2':
```

```
        task_number = int(input("Enter the task number to update: ")) - 1
```

```
        new_task = input("Enter the new task: ")
```

```
        to_do_list.update_task(task_number, new_task)
```

```
    elif choice == '3':
```

```
        task_number = int(input("Enter the task number to delete: ")) - 1
```

```
        to_do_list.delete_task(task_number)

elif choice == '4':

    task_number = int(input("Enter the task number to complete: ")) - 1

    to_do_list.complete_task(task_number)

elif choice == '5':

    to_do_list.show_tasks()

elif choice == '6':

    break

else:

    print("Invalid choice. Please try again.")


if __name__ == "__main__":

    main()
```