

```
import org.springframework.web.bind.annotation.*;
```

```
import java.util.ArrayList;
```

```
import java.util.List;
```

```
@RestController
```

```
@RequestMapping("/api/tasks")
```

```
public class TaskController {
```

```
    private final List<Task> tasks = new ArrayList<>();
```

```
    private long nextId = 1;
```

```
    @GetMapping
```

```
    public List<Task> getAllTasks() {
```

```
        return tasks;
```

```
    }
```

```
@GetMapping("/{id}")
public Task getTaskById(@PathVariable Long id) {
    for (Task task : tasks) {
        if (task.getId().equals(id)) {
            return task;
        }
    }
    return null;
}
```

```
@PostMapping
public Task createTask(@RequestBody Task task) {
    task.setId(nextId++);
    tasks.add(task);
    return task;
}
```



```
@PutMapping("/{id}")
public Task updateTask(@PathVariable Long id, @RequestBody Task updatedTask) {
    for (int i = 0; i < tasks.size(); i++) {
        Task task = tasks.get(i);
        if (task.getId().equals(id)) {
            updatedTask.setId(id);
            tasks.set(i, updatedTask);
            return updatedTask;
        }
    }
    return null;
}
```

```
@DeleteMapping("/{id}")
public void deleteTask(@PathVariable Long id) {
    tasks.removeIf(task -> task.getId().equals(id));
}
}
```