

Design Pattern

Mediator

```
public interface ICommand {
    void grantLandingPermission();
}

public class Flight implements ICommand {
    private IATCMediator atcMediator;

    public Flight(IATCMediator atcMediator) {
        this.atcMediator = atcMediator;
    }

    public void grantLandingPermission() {
        if (atcMediator.isLandingOk()) {
            System.out.println("landing done");
            atcMediator.setLandingStatus(true);
        } else
            System.out.println("waiting to land");
    }

    public void getReady() {
        System.out.println("ready");
    }
}

public class Runway implements ICommand {
    private IATCMediator atcMediator;

    public Runway(IATCMediator atcMediator) {
        this.atcMediator = atcMediator;
        atcMediator.setLandingStatus(true);
    }

    public void grantLandingPermission() {
        System.out.println("landing permission granted");
        atcMediator.setLandingStatus(true);
    }
}

public interface IATCMediator {
    void registerRunway(Runway runway);
    void registerFlight(Flight flight);
    boolean isLandingOk();
    void setLandingStatus(boolean status);
}
```

```

public class ATCMediator implements IATCMediator {
    private Flight flight;
    private Runway runway;
    public boolean status;

    public void registerRunway(Runway runway) {
        this.runway = runway;
    }

    public void registerFlight(Flight flight) {
        this.flight = flight;
    }

    public boolean isLandingOk() {
        return status;
    }

    public void setLandingStatus(boolean status) {
        this.status = status;
    }

    public String toString() {
        return flight + " - " + runway + " - " + status;
    }
}

public class Application {
    public static void main(String... args) {
        IATCMediator atcMediator = new ATCMediator();
        Runway mainRunway = new Runway(atcMediator);

        atcMediator.registerRunway(mainRunway);

        Flight sparrow101 = new Flight(atcMediator);
        atcMediator.registerFlight(sparrow101);
        sparrow101.getReady();

        mainRunway.grantLandingPermission();
        sparrow101.grantLandingPermission();
    }
}

```