

Checking for 3NF

Airport

<u>AirportCode</u>	AirportName	City	Country	EstablishedYear
FD1	↑	↑	↑	↑

The table **Airport** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is AirportCode. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Airport** is in 3NF.

Airline

<u>AirlineCode</u>	AirlineName	Owner	FleetSize	Address	NoOfDestinations	HeadOfficeEmail	WebsiteURL	CommencementYear
FD1	↑	↑	↑	↑	↑	↑	↑	↑

The table **Airline** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is AirlineCode. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Airline** is in 3NF.

Aircraft

<u>AircraftCode</u>	Name	Model	Manufacturer	MaxNoOfSeats	AirlineCode	FlightNo
FD1	↑	↑	↑	↑	↑	↑

The table **Aircraft** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is AircraftCode. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Aircraft** is in 3NF.

Aircrew

<u>StaffID</u>	PassportNo	FirstName	LastName	Gender	Address	Designation	DateJoined	AirlineTrainingDetails	AcadamicEducationDetails	AirlineCode	LegNo	CheckInTime
FD1	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

The table **Aircrew** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is StaffID. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Aircrew** is in 3NF.

Flight

<u>FlightNo</u>	FlightPath	AirlineCode	FlightType
FD1	↑	↑	↑

The table **Flight** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is FlightNo. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Flight** is in 3NF.

Flight\_Leg

<u>LegNo</u>	DateOfFlight	FlightStatus	AircraftCode	FlightNo
FD1	↑	↑	↑	↑

The table **Flight\_Leg** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is LegNo. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Flight\_Leg** is in 3NF.

Passenger

<u>PassportNo</u>	FirstName	LastName	Gender	Nationality	DOB	PassportIssueDate	PassportExpiryDate
FD1	↑	↑	↑	↑	↑	↑	↑

The table **Passenger** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is PassportNo. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Passenger** is in 3NF.

Reservation

<u>TicketNo</u>	Class	SeatNo	CheckInTime	BaggageWeight	PassportNo	LegNo
FD1	↑	↑	↑	↑	↑	↑

The table **Reservation** is in 2NF. It doesn't have transitive dependencies. All the non primary key attributes depend on the primary key of the table which is TicketNo. It has a functional dependency named FD1 and it's determinant is the super key of the table. Therefore the table **Reservation** is in 3NF.