

Checking 2NF

Airport

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

All the attributes of the table **Airport** depends on it's super key which is AirportCode.
Therefore, the functional dependency 1(FD1) of the table **Airport** is a full functional dependency.
There are no partial dependencies so the table **Airport** is in 2NF

Airline

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

All the attributes of the table **Airline** depends on it's super key which is AirlineCode.
Therefore, the functional dependency 1(FD1) of the table **Airline** is a full functional dependency.
There are no partial dependencies so the table **Airline** is in 2NF.

Aircraft

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

All the attributes of the table **Aircraft** depends on it's super key which is AircraftCode.
Therefore, the functional dependency 1(FD1) of the table **Aircraft** is a full functional dependency.
There are no partial functional dependencies so the table **Aircraft** is in 2NF.

Aircrew

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

All the attributes of the table **Aircrew** depends on it's super key which is StaffID.
Therefore, the functional dependency 1(FD1) of the table **Aircrew** is a full functional dependency.
There are no partial functional dependencies so the table **Aircrew** is in 2NF.

Flight

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

All the attributes of the table **Flight** depends on it's super key which is FlightNo.
Therefore, the functional dependency 1(FD1) of the table **Flight** is a full functional dependency.
There are no partial functional dependencies so the table **Flight** is in 2NF.

Flight_Leg

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

All the attributes of the table **Flight_Leg** depends on it's super key which is LegNo.
Therefore, the functional dependency 1(FD1) of the table **Flight_Leg** is a full functional dependency.
There are no partial functional dependencies so the table **Flight_Leg** is in 2NF.

Passenger

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

All the attributes of the table **Passenger** depends on it's super key which is PassportNo.
Therefore, the functional dependency 1(FD1) of the table **Passenger** is a full functional dependency.
There are no partial functional dependencies so the table **Passenger** is in 2NF.

Reservation

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

All the attributes of the table **Reservation** depends on it's super key which is TicketNo.
Therefore, the functional dependency 1(FD1) of the table **Reservation** is a full functional dependency.
There are no partial functional dependencies so the table **Reservation** is in 2NF.

Provide_Services

<u>AirlineCode</u>	<u>AirportCode</u>	AirlineName	Owner	FleetSize	Address	NoOfDestinations	HeadOfficeEmail	WebsiteURL	CommencementYear	AirportName	City	Country	EstablishedYear
FD1	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
	FD2	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

Some of the attributes of the table **Provide_Services** depends on AirlineCode.
Other attrubytes depends on AirportCode.
Therefore FD1 and FD2 are partial functional dependencies.
Therefore the table **Provide_Services** is not in 2NF.