

Checking for 3NF

Provide_Services_Airline

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

The table **Provide_Services_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 **Provide_Services_Airline** is in 3NF.

Provide_Services_Airport

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

The table **Provide_Services_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 **Provide_Services_Airport** is in 3NF.

Airline_Contact_No

<u>AirlineCode</u>	<u>ContactNo</u>
FD1	↑

The table **Airline_Contact_No** is in 2NF. It doesn't have transitive dependencies.
It has a functional dependency named FD1 and it's dependent which is ContactNo is a prime attribute.
Therefore the table **Airline_Contact_No** is in 3NF.

Aircrew_Contact_No

<u>StaffID</u>	<u>ContactNo</u>
FD1	↑

The table **Aircrew_Contact_No** is in 2NF. It doesn't have transitive dependencies.
It has a functional dependency named FD1 and it's dependent which is ContactNo is a prime attribute.
Therefore the table **Aircrew_Contact_No** is in 3NF.

Passenger_Contact_No

<u>PassportNo</u>	<u>ContactNo</u>
FD1	↑

The table **Passenger_Contact_No** is in 2NF. It doesn't have transitive dependencies.
It has a functional dependency named FD1 and it's dependent which is ContactNo is a prime attribute.
Therefore the table **Passenger_Contact_No** is in 3NF.

Landing

<u>FlightNo</u>	<u>AirportName</u>
FD1	↑

The table **Landing** is in 2NF. It doesn't have transitive dependencies.
It has a functional dependency named FD1 and it's dependent which is AirportName is a prime attribute.
Therefore the table **Landing** is in 3NF.

Take_Off

<u>FlightNo</u>	<u>AirportName</u>
FD1	↑

The table **Take_Off** is in 2NF. It doesn't have transitive dependencies.
It has a functional dependency named FD1 and it's dependent which is AirportName is a prime attribute.
Therefore the table **Take_Off** is in 3NF.