

Checking for BCNF

Provide\_Services\_Airline

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

The table **Provide\_Services\_Airline** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is AirlineCode is the super key of the table **Provide\_Services\_Airline**.  
Therefore the table **Provide\_Services\_Airline** is in BCNF.

Provide\_Services\_Airport

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

The table **Provide\_Services\_Airport** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is AirportCode is the super key of the table **Provide\_Services\_Airport**.  
Therefore the table **Provide\_Services\_Airport** is in BCNF.

Airline\_Contact\_No

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

The table **Airline\_Contact\_No** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is AirlineCode is the not the super key of the table **Airline\_Contact\_No**.  
Therefore the table **Airline\_Contact\_No** is not in BCNF. However, this table cannot be divided any further.  
Therefore it's not possible to normalise this to BCNF.

Landing

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

The table **Landing** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is FlightNo is the not the super key of the table **Landing**.  
Therefore the table **Landing** is not in BCNF. However, this table cannot be divided any further.  
Therefore it's not possible to normalise this to BCNF.

Take\_Off

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

The table **Take\_Off** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is FlightNo is the not the super key of the table **Take\_Off**.  
Therefore the table **Take\_Off** is not in BCNF. However, this table cannot be divided any further.  
Therefore it's not possible to normalise this to BCNF.

Schedule\_Days

<u>FlightNo</u>	<u>FlightDate</u>	EstimatedArrivalTime	EstimatedDepartureTime
FD1		↑	↑

The table **Schedule\_Days** is in 3NF. It has a functional dependency named FD1.  
It's determinant which is FlightNo FlightDate is the super key of the table **Schedule\_Days**.  
Therefore the table **Schedule\_Days** is in BCNF.

Pilot

<u>StaffID</u>	FirstName	LastName	PassportNo	Adress	Gender	Designation	DateJoined	AirlineTraining Details	AcademicEducation Details	TotalFlying Hours	LegNo	AirlineCode
FD1	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

The table **Pilot** is in 3NF. It has a functional dependency FD1 and it's determinant which is StaffID is the super key of the table **Pilot**.  
Therefore the table **Pilot** is in BCNF.