City

Cityid->is_tourist_city

Cityid->cityname

=>The Schema is in BCNF and it cannot be further divided because on left side, we have super key(or candidate key)on left side and it does not have any redundancy.

Agency

Agencyid->cityid

Agencyid->address

Agencyid->name

Agencyid->supervisor

supervisor->phone (X)

=>The Schema is in 2NF because it shows transitivity. Thus Agency table will be decomposed and phone field will be removed from it and a new schema is created. Which has 2 Fields-> Supervisor, phone

=>After this, The relation becomes BCNF.

Supervisor_phone

Supervisor->phone

=>The Schema is in BCNF because supervisor will identify phone.

Package

Package_id->pname

Package_id->type

Package_id->transport_mode

Package_id->source_city

Package_id->destination_city

Package_id->days

Package_id->nights

Package_id->price

=>The Schema is perfectly in BCNF as there is no Transitivity or redundancy or partial dependency. LHS is superkey or candidate key{packageid}.

Package_Group_Hotel

Groupid,package_id,journey_date->hotelid

Package_id,hotelid,journey_date->groupid

Groupid,hotelid,journey_date->packageid

=>Group_package_hotel is now in BCNF as all the FDs have determinant as superkey(or candidate key) thus it cannot be further be divided.

Passenger

Passengerid->fname

Passengerid->lname

Passengerid->groupid

Passengerid->aadharno

Passengerid->birthdate

Passengerid->gender

Passengerid->phone

aadharno ->fname

aadharno ->lname

aadharno ->birthdate

aadharno ->gender

aadharno ->phone

=>The schema is in BCNF because in all FDs, on LHS we have Superkey(or candidate key) as determinant.

Insurance

Insurance_id->passenger_id

Insurance_id->company

Insurance_id->due_date

=>The relation is in BCNF. There is no decomposition possible here and on LHS in all FDs we have superkey or candidate key.

Booking

Bookingid->date_of_booking

Bookingid->price

Bookingid->groupid

Bookingid->package_id

Bookingid->ticketno

Groupid,packageid->bookingid

Groupid,packageid->date_of_booking

Groupid,packageid->price

=> Booking is in BCNF as in all FDs, LHS is a super key(or candidate key)[Bookingid,{Groupid,packageid}].

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Ticket

Ticketno->date

Ticketno->paymentid

Ticketno->bookingid

=> Ticket is in BCNF as in all FDs, LHS is a super key(or candidate key)[Ticketno].

Payment

Paymentid->mode

Paymentid->date

=>The schema is in BCNF perfectly. Because in left side we have super key. And mode,date both are dependent on paymentid.

Feedback

Feedbackid->msg

Feedbackid->date

=>The relation is in BCNF because you can't find any redundancy here and all is identified by the feedbackid. Feedbackid is candidate key here.

Service

Serviceid->sname

Serviceid->type

Serviceid->ratings

Serviceid->address

Serviceid->due_date

Serviceid->company

=>Service schema is important because it is made on ISA relationship. It is perfectly in BCNF because all the other fields except the primary key are identified by the primary key. And you cant find any partial dependency or transitivity here. Serviceid is on LHS and it is superkey[candidate key].

Hotel

Hotelid->address

Hotelid->ratings

Hotelid->hotel_name

Hotelid->cityid

=>Hotel schema is in BCNF and it cant be further decomposed and on LHS we have Hotelid which is superkey[candidate key].

Admin

Adminid->email

Adminid->password

Adminid->name

=>Admin schema is also in BCNF. Because we don't have any partial dependency or transitivity here. Adminid can identify email,password and name easily. Adminid will be superkey.

Offer

offerid->name

offerid->start_date

offerid->end_Date

offerid->offercode

offerid->description

=>Offer schema is in BCNF. Because at left side we have offerid which is primary key. Which is irreducible and right sides all are non-prime attributes. Offerid as determinant in all FDs is superkey or candidate key.

Passenger_Service

Passengerid,serviceid->Passengerid,serviced

=>it is in BCNF. It is example of trivial Dependency thus it shows A->A. Thus it is in BCNF.

Passenger_Feedback

Passengerid,Feedbackid->Passengerid,feedbackid

=>it is in BCNF.It is example of Trivial Dependency thus it shows A->A. Thus it displays it is in BCNF.

Passenger_Offer

Groupid,offerid->Groupid,offerid

=>it is in BCNF.Another example of Trivial Dependency. (A->A)