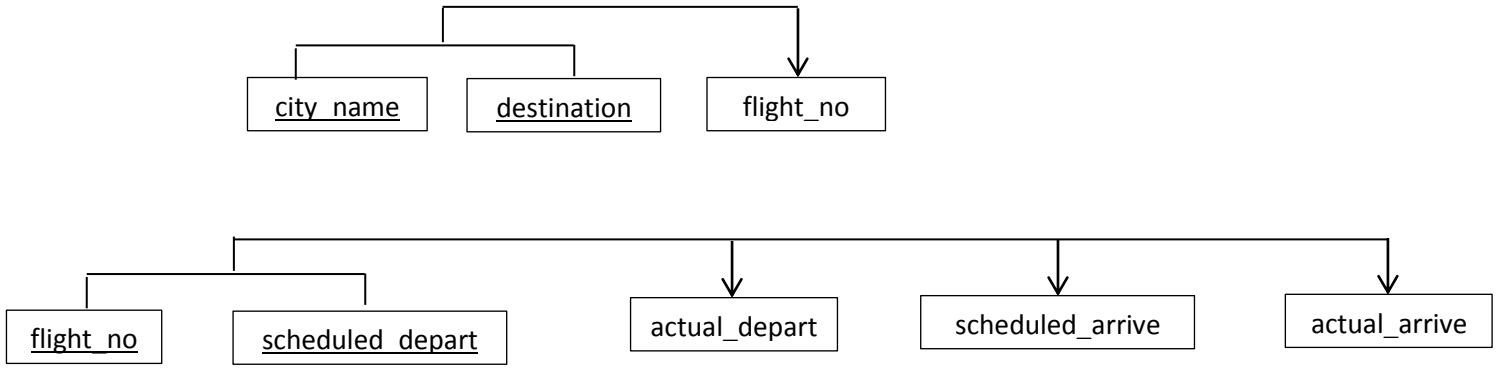
UNF

- FLIGHT_REPORT (flight_no, city_name, destination (scheduled_depart, scheduled_arrive, actual_depart, actual_arrive))

1NF – Remove repeating group & establish PK's

FLIGHT_DETAIL (city_name, destination, flight_no)

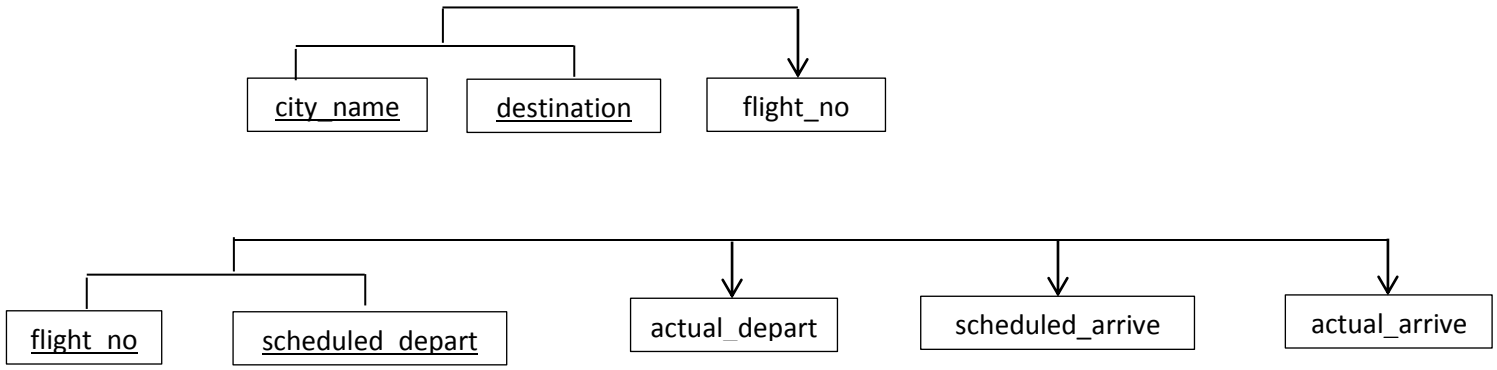
FLIGHT_STATUS (flight_no, scheduled_depart, actual_depart, scheduled_arrive, actual_arrive)



2NF – Remove partial dependencies (unchanged)

None of the attributes are partially dependent, therefore the diagram remains the same at this step.

- FLIGHT_DETAIL (city_name, destination, flight_no)
- FLIGHT_STATUS (flight_no, scheduled_depart, actual_depart, scheduled_arrive, actual_arrive)

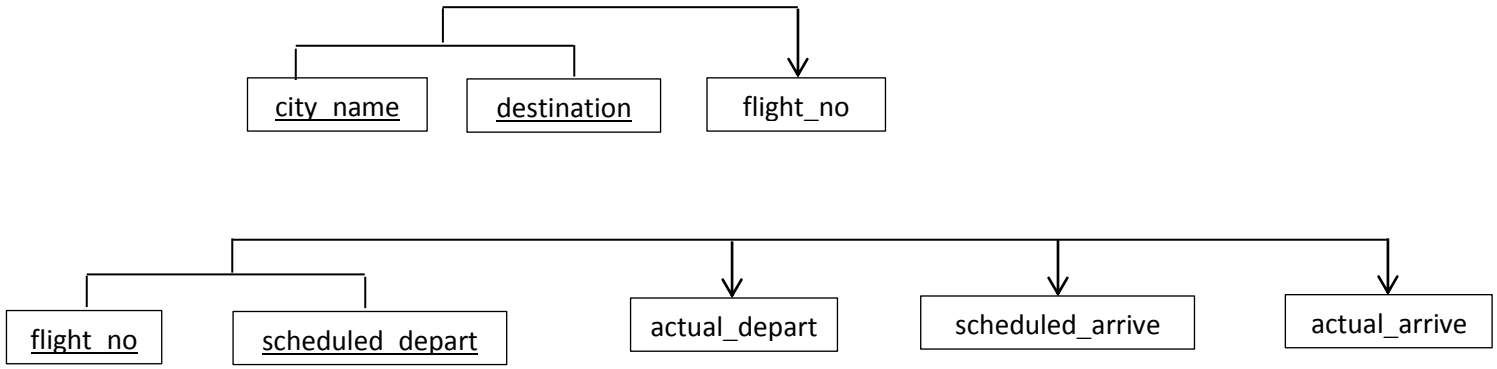


3NF – Remove transitive dependencies (unchanged)

There are no transitive dependencies since each attribute is functionally dependent on their respective primary keys. For example, the city_name & the destination are dependent on the flight_no (primary key). Therefore, the dependency diagram remains unchanged at this step.

FLIGHT_DETAIL (city_name, destination, flight_no)

FLIGHT_STATUS (flight_no, scheduled_depart, actual_depart, scheduled_arrive, actual_arrive)



Assumptions:

- Since flight_no already contains each respective airline's IATA code, one can identify which airline is performing the flight; therefore, I have not included any further airline data such as airline name.
- Since we are only focusing on the origin & destination and aren't interested in the leg details, for the purposes of this database model, it is assumed that every journey has one route only.