Port Tours Available

UNF

PORT_TOUR_AVAIBLE(port_code, port_name, country_code, country_name, (port_temp_mth, port_temp_avg_high, port_temp_avg_low), (tour_no, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time))

1NF

PORT_TOUR_AVAIBLE(port_code, port_name, country_code, country_name)

PORT_TEMPERATURE(port_code, port_temp_mth, port_temp_avg_high, port_temp_avg_low)

TOUR_AVAILABLE(port_code, tour_no, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time)

Partial Dependencies:

No Partial Dependencies

2NF

PORT_TOUR_AVAIBLE(port_code, port_name, country_code, country_name)

PORT_TEMPERATURE(port_code, port_temp_mth, port_temp_avg_high, port_temp_avg_low)

TOUR_AVAILABLE(port_code, tour_no, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time)

Transitive Dependencies:

country_code --> country_name

3NF

PORT_TOUR_AVAIBLE(port_code, port_name, country_code)

COUNTRY(country_code, country_name)

PORT_TEMPERATURE(<u>port_code</u>, <u>port_temp_mth</u>, port_temp_avg_high, port_temp_avg_low)

TOUR_AVAILABLE(<u>port_code</u>, <u>tour_no</u>, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time)

Full Dependencies:

port_code --> port_name, country_code

country_code --> country_name

port_code, port_temp_mth --> port_temp_avg_high, port_temp_avg_low

port_code, tour_no --> tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time

Port – Tour Participant Report

UNF

TOUR(port_code, tour_no, tour_name, tour_date, tour_start_time, (passenger_id, passenger_name, passenger_language, cruise_id, cruise_name, payment_received))

1NF

TOUR(<u>port_code</u>, <u>tour_no</u>, <u>tour_date</u>, tour_name, tour_start_time)

Participant(<u>port_code</u>, <u>tour_no</u>, <u>tour_date</u>, <u>passenger_id</u>, passenger_name, passenger_language, cruise_id, cruise_name, payment_received)

Partial Dependencies:

passenger_id --> passenger_name, passenger_language

Port_code, tour_no --> tour_name, tour_start_time

2NF

TOUR(port_code, tour_no, tour_date)

TOUR_DETAIL(port_code, tour_no, tour_name, tour_start_time)

PARTICIPANT(port_code, tour_no, tour_date , passenger_id, cruise_id, cruise_name, payment_received)

PASSENGER(passenger_id, passenger_name, passenger_language)

Transitive Dependencies:

cruise_id --> cruise_name

3NF

TOUR(port_code, tour_no, tour_date, tour_name, tour_start_time)

TOUR_DETAIL(port_code, tour_no, tour_name, tour_start_time)

PARTICIPANT(port_code, tour_no, tour_date, passenger_id, cruise_id, payment_received)

CRUISE(cruise_id, cruise_name)

PASSENGER(passenger_id, passenger_name, passenger_language)

Full Dependencies:

port_code, tour_no --> tour_name, tour_start_time

port_code, tour_no, tour_date , passenger_id --> cruise_id, payment_received

cruise_id --> cruise_name

passenger_id --> passenger_name, passenger_language

COLLECTED 3NF RELATIONS:

1.PORT_TOUR_AVAIBLE(port_code, port_name, country_code)

2.COUNTRY(country_code, country_name)

3.PORT_TEMPERATURE(port_code, port_temp_mth, port_temp_avg_high, port_temp_avg_low)

4.TOUR_AVAILABLE(port_code, tour_no, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time)

5.TOUR(port_code, tour_no, tour_date)

6.TOUR_DETAIL(port_code, tour_no, tour_name, tour_start_time)

7.PARTICIPANT(port_code, tour_no, tour_date , passenger_id, cruise_id, payment_received)

8.CRUISE(cruise_id, cruise_name)

9.PASSENGER(passenger_id, passenger_name, passenger_language)

ATTRIBUTE SYNTHESIS

1.

PORT_TOUR_AVAIBLE(port_code, port_name, country_code)

2.

COUNTRY(country_code, country_name)

3.

PORT_TEMPERATURE(port_code, port_temp_mth, port_temp_avg_high, port_temp_avg_low)

4. & 6.

TOUR_AVAILABLE(port_code, tour_no, tour_name, tour_desc, tour_hours, tour_cost, tour_wheel_chair, tour_availablility, tour_start_time)

5.

TOUR(port_code, tour_no, tour_date)

7.

PARTICIPANT(port_code, tour_no, tour_date , passenger_id, cruise_id, payment_received)

8.

CRUISE(cruise_id, cruise_name)

9.

PASSENGER(passenger_id, passenger_name, passenger_language)