Group 136 – Normalization
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Port Tours Available
UNF:
PORT(port_code, port_name, coun_code, coun_name, (port_month, aver_hight, aver_low), (tour_no, tour_name, tour_desc, hours_requ, tour_cost, wheel_chair, tour_avai, start_time))

1NF:
PORT(port_code, port_name, coun_code, coun_name)
TEMP(port_code, port_month, aver_hight, aver_low)
TOURS(port_code, tour_no, tour_name, tour_desc, hours_requ, tour_cost, wheel_chair, tour_avai, start_time)

No partial dependency

2NF:
PORT(port_code, port_name, coun_code, coun_name)
TEMP(port_code, port_month, aver_hight, aver_low)
TOURS(port_code, tour_no, tour_name, tour_desc, hours_requ, tour_cost, wheel_chair, tour_avai, start_time)

Transitive Dependency:
coun_code->coun_name

3NF:
PORT(port_code, port_name, coun_code)

COUNTRY(coun_code, coun_name)

TEMP(port_code, port_month, aver_hight, aver_low)

TOURS(port_code, tour_no, tour_name, tour_desc, hours_requ, tour_cost, wheel_chair, tour_avai, start_time)

Full Dependencies:
port_code -> port_name, coun_code
coun_code -> coun_name
port_code, port_month -> aver_hight, aver_low
port_code, tour_no -> tour_name, tour_desc, hours_requ, tour_cost, wheel_chair, tour_avai, start_time

Port – Tour Participant Report

UNF:

REPORT(port_code, tour_no, tour_name, tour_date, start_time, generated(pass_id, pass_name, prin_langu, cruise_id, cruise_name, pay_rece))

1NF:

REPORT(port_code, tour_no, tour_name, tour_date, start_time)

PARTICIPANT(port_code, tour_no, tour_date, generated, pass_id, pass_name, prin_langu, cruise_id, cruise_name, pay_rece)

Partial Dependency:

port_code, tour_no -> tour_name, start_time

pass_id-> pass_name, prin_langu

2NF:

REPORT(port_code, tour_no, tour_date)

INFO(port_code, tour_no, tour_name, start_time)

PARTICIPANT(port_code, tour_no, tour_date, generated, pass_id, cruise_id, cruise_name, pay_rece)

PASSENGER (pass_id, pass_name, prin_langu)

Transitive Dependency:

Cruise_id->cruise_name

3NF:

REPORT(port_code, tour_no, tour_date)

INFO(port_code, tour_no, tour_name, start_time)

PARTICIPANT(port_code, tour_no, tour_date, generated, pass_id, cruise_id, pay_rece)

PASSENGER(pass_id, pass_name, prin_langu)

CRUISE(cruise_id, cruise_name)

Full Dependencies:

tour_no -> tour_name, tour_start_time

port_code, tour_no, pass_id -> cruise_id, pay_received

passenger_id -> passenger_name, passenger_language

cruise_id -> cruise_nam