

Student Name: Ang Qiao Xin

Student ID: 33520054

UNF

CRUISE(cruise_id, cruise_name, cruise_cost, (port_code, port_name, port_latitude, port_longitude, country_code, country_name, iti_depart_type, iti_depart_datetime))

1NF

CRUISE(cruise_id, cruise_name, cruise_cost)

CKs:

cruise_id

ITINERARY(cruise_id, port_code, port_name, port_latitude, port_longitude, country_code, country_name, iti_depart_type, iti_depart_datetime)

CKs:

cruise_id, iti_depart_datetime

Partial dependency:

No partial dependencies present

2NF

CRUISE(cruise_id, cruise_name, cruise_cost)

ITINERARY(cruise_id, port_code, port_name, port_latitude, port_longitude, country_code, country_name, iti_depart_type, iti_depart_datetime)

Transitive dependency:

port_code → port_name, port_latitude, port_longitude, country_code

country_code → country_name

3NF

CRUISE(cruise_id, cruise_name, cruise_cost)

ITINERARY(cruise_id, iti_depart_datetime, port_code, iti_depart_type)

PORT(port_code, port_name, port_latitude, port_longitude, country_code)

COUNTRY(country_code, country_name)

Full Dependencies:

cruise_id → cruise_name, cruise_cost

cruise_id, iti_depart_datetime → port_code, iti_depart_type

port_code → port_name, port_latitude, port_longitude, country_code

country_code → country_name