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Student ID: 33520054
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UNF
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CRUISE(cruise_id, cruise_name, cruise_cost, (port_code, port_name, port_latitude, port_longtitude, country_code, country_name, iti_depart_type, iti_depart_datetime))

1NF

CRUISE(cruise id, cruise name, cruise cost)

CKs:

cruise id

ITINERARY(<u>cruise_id</u>, port_code, port_name, port_latitude, port_longtitude, country_code, country_name, iti_depart_type, <u>iti_depart_datetime</u>)

CKs:

cruise_id, iti_depart_datetime

Partial dependency:

No partial dependencies present

2NF

CRUISE(<u>cruise_id</u>, cruise_name, cruise_cost)
ITINERARY(<u>cruise_id</u>, port_code, port_name, port_latitude, port_longtitude, country_code, country_name, iti_depart_type, <u>iti_depart_datetime</u>)

Transitive dependency:

port_code \rightarrow port_name, port_latitude, port_longtitude, country_code country_code \rightarrow country_name

3NF

CRUISE(<u>cruise_id</u>, cruise_name, cruise_cost)

ITINERARY(<u>cruise_id</u>, <u>iti_depart_datetime</u>, port_code, iti_depart_type)

 ${\sf PORT}(\underline{port_code} \ , \, port_name, \, port_latitude, \, port_longtitude, \, country_code)$

COUNTRY(<u>country_code_</u>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_longtitude, country_code country_code → country_name