Student ID: 33520054

UNF

CRUISE(cruise_id, cruise_name, cruise_cost, (port_code, port_name, port_latitude, port_longtitude, country_code, country_name, depart_type, depart_datetime))

1NF

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

CKs: cruise id

PORT_ITI(<u>cruise_id</u>, port_code, port_name, port_latitude, port_longtitude, country_code, country_name, depart_type, <u>depart_datetime</u>)

CKs:

cruise_id, depart_datetime

Partial dependency:

No partial dependencies present

2NF

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

PORT_ITI(<u>cruise_id</u>, port_code, port_name, port_latitude, port_longtitude, country_code, country_name, depart_type, <u>depart_datetime</u>)

Transitive dependency:

Port_code → port_name, port_latitude, port_longtitude country_code -> country_name

3NF

CRUISE(cruise id, cruise name, cruise cost)

PORT_ITI(<u>cruise_id</u>, port_code, country_code, depart_type, <u>depart_datetime</u>)

PORT(<u>port code</u>, port name, port latitude, port longtitude)

COUNTRY(<u>country_code_</u> country_name)

Full Dependencies:

cruise_id \rightarrow cruise_name, cruise_cost cruise_id, depart_datetime \rightarrow port_code, country_code, depart_type port_code \rightarrow port_name, port_latitude, port_longtitude country_code \rightarrow country_name