

TASK 2 Ocean Odyssey Normalisation

Table 2:

UNF:

Cruise (CruiseID, CruiseName, CostPerPerson, (PortCode, PortName, PortLatitude, PortLongitude, CountryCode, CountryName, DepartureArrival, DateTime))

1NF:

CRUISE (CruiseID, DateTime, PortCode, DepartureArrival, CruiseName, CostPerPerson, PortName, PortLatitude, PortLongitude, CountryCode, CountryName)

Candidate Keys: CruiseID, DateTime, PortCode, DepartureArrival

Primary Keys: CruiseID, DateTime, PortCode, DepartureArrival

Partial Dependencies:

CruiseID → CruiseName, CostPerPerson

PortCode → PortName, PortLatitude, PortLongitude, CountryCode

CountryCode → CountryName

2NF:

CRUISE (CruiseID, CruiseName, CostPerPerson)

VISIT (CruiseID, DateTime, PortCode, DepartureArrival)

PORT (PortCode, CountryCode, PortName, PortLatitude, PortLongitude,
CountryName)

Transitive Dependencies:

CountryCode → CountryName

3NF:

CRUISE (CruiseID, CruiseName, CostPerPerson)

VISIT (CruiseID, DateTime, PortCode, DepartureArrival)

PORT (PortCode, PortName, PortLatitude, PortLongitude, CountryCode)

COUNTRY (CountryCode, CountryName)

FINAL 3NF:

CRUISE (CruiseID, CruiseName, CostPerPerson)

VISIT (CruiseID, DateTime, PortCode, DepartureArrival)

PORT (PortCode, PortName, PortLatitude, PortLongitude, CountryCode)

COUNTRY (CountryCode, CountryName)

Full Dependencies:

CruiseID → CruiseName, CostPerPerson

CruiseID, DateTime, PortCode, DepartureArrival → No other attributes

PortCode → PortName, PortLatitude, PortLongitude, CountryCode

CountryCode → CountryName