

# Normalisation

i) Tours which are available at a given port

## UNF

PORT\_TOUR (port\_code, port\_name, country\_code, country\_name, (temp\_month, temp\_average\_high, temp\_average\_low), (tour\_number, tour\_name, tour\_description, tour\_hours\_required, tour\_cost\_per\_person, tour\_wheel\_chair\_access, tour\_availability, tour\_start\_time))

## 1NF

PORT\_TOUR (port\_code, port\_name, country\_code, country\_name)

PORT\_TEMP (temp\_month, port\_code, temp\_average\_high, temp\_average\_low)

PORT\_AVAILABLE\_TOUR (tour\_number, port\_code, tour\_name, tour\_description, tour\_hours\_required, tour\_cost\_per\_person, tour\_wheel\_chair\_access, tour\_availability, tour\_start\_time)

## Candidate keys

For PORT\_TEMP

- None

For PORT\_TEMP

- (temp\_month, port\_code)

For PORT\_AVAILABLE\_TOUR

- (tour\_number, port\_code)
- (port\_code, tour\_name)

## Partial dependencies:

- None

# Normalisation

## 2NF

PORT\_TOUR (port\_code, port\_name, country\_code, country\_name)

PORT\_TEMP (temp\_month, port\_code, temp\_average\_high, temp\_average\_low)

PORT\_AVAILABLE\_TOUR (tour\_number, port\_code, tour\_name, tour\_description, tour\_hours\_required, tour\_cost\_per\_person, tour\_wheel\_chair\_access, tour\_availability, tour\_start\_time)

### Transitive dependencies:

For PORT\_TOUR

- country\_code -> country\_name

## 3NF

PORT\_TOUR (port\_code, port\_name, country\_code)

PORT\_TEMP (temp\_month, port\_code, temp\_average\_high, temp\_average\_low)

PORT\_AVAILABLE\_TOUR (tour\_number, port\_code, tour\_name, tour\_description, tour\_hours\_required, tour\_cost\_per\_person, tour\_wheel\_chair\_access, tour\_availability, tour\_start\_time)

COUNTRY (country\_code, country\_name)

## Full Dependency

port\_code -> port\_name, country\_code

temp\_month, port\_code -> temp\_average\_high, temp\_average\_low

tour\_number, port\_code -> tour\_name, tour\_description, tour\_hours\_required, tour\_cost\_per\_person, tour\_wheel\_chair\_access, tour\_availability, tour\_start\_time

country\_code -> country\_name