Assumptions

General

1. Names of country are Varchar of size 20
2. All types of namings (eg. Companies, person, ships) are Varchar of size 20
3. All ID's are of Numeric with precision 7

Operator

1. opt_id precision – 4
- This is because it's safe to assume that there won't be more than a 1000 different ship operators in the world.

SHIP

1. ship_tonnage precision – 6
- the heaviest cruise ship in the world weights 236,857 tonnes
- also, most big cruise ships weigh around this 6 digit mark

2. ship_max_guest_cap precision – 5
- the biggest cruise ship in the world could hold up to 9,000 passsengers. Hence, we've used a precision of 5 to prepare for the next biggest cruise ship that can hit a capacity of 10,000 passengers

CABIN

1. cabin_number – Varchar size 5
- the largest cruise ship in the world has up to 2,867 cabins. Furthermore, since in Assingment 1 an example of cabin number would be eg. D1, therefore a Varchar of size 5 would allow for a single alphabet followed by up to 4 numerics.

2. cabin_capacity – precision 2
- the largest cabin on a cruise would possibly store at most 99 people (the staff's cabin)

3. cabin_class – precision 10
- the cabin class that has the longest name is ocean view, which is of length 10

Assumptions

PORT

1. port_code – precision 4
- there are over 1,200 cruise ports in the world

2. port_longitude and port_latitude
- the number of digits after the decimal point is a fixed 7 digits
- the number of digits before the decimal point ranges

PASSENGER

1. pasenger_phone_no
- since the phone number length of these passengers may vary from country to country, we set Varchar of size 20
- the longest number would be15, excluding the prefix of the
- having to include the country code, the size of 20 would be the safest

PORT_TOUR

1. tour_cost_per_person – precision 6, scale 2
- we allow the tours cost to go up to a 1000, which is unlikely but possible.
- we also allow for decimal values eg. 100.50, which is possible for cost that includes service charge