

INTRODUCTION TO DATABASES

ASSIGNMENT 1 – REPORT TEMPLATE AND GUIDELINES

Outline Business Scenario

A yacht charter company requires a web-based system to manage aspects of its holiday charter business.

There are a number of customers, each of whom may book a number of holiday charters, with each charter booked by an individual customer. A holiday charter may involve one yacht only, but each yacht may be involved in many holiday charters. A holiday charter may visit several ports and each port will be visited by many holiday charters. Most ports have several yachts based in them (although a few smaller ports have no yachts based in them) with each yacht based in just a single home port.

Information to be held and manipulated include:

- *the name, nationality, email address, phone number and id number of each customer.*
- *the name, type, model, home port, number of berths and cost of hire per day of each yacht.*
- *the name, phone number, email address and number of docking places at each port.*
- *the charter id, start date and duration of each charter, and the visit id, expected date of arrival and duration of stay at each port visited.*

Business processes to be supported include the ability to:

- *add details of a new customer together with the start date and duration of the charter they have booked, but without specifying the yacht to be used or the ports to be visited.*
- *list the total length of stay, between two given dates, of yachts in the fleet in each port.*
- *get a list of yachts (by name) visiting their home port between two given dates, together with the date of arrival and the length of the stay.*
- *list the ports visited by a given customer together with the date of arrival and length of stay, ordered by date.*
- *remove a yacht temporarily for a period of time (e.g., for servicing) and get a list of yachts that are not available,*

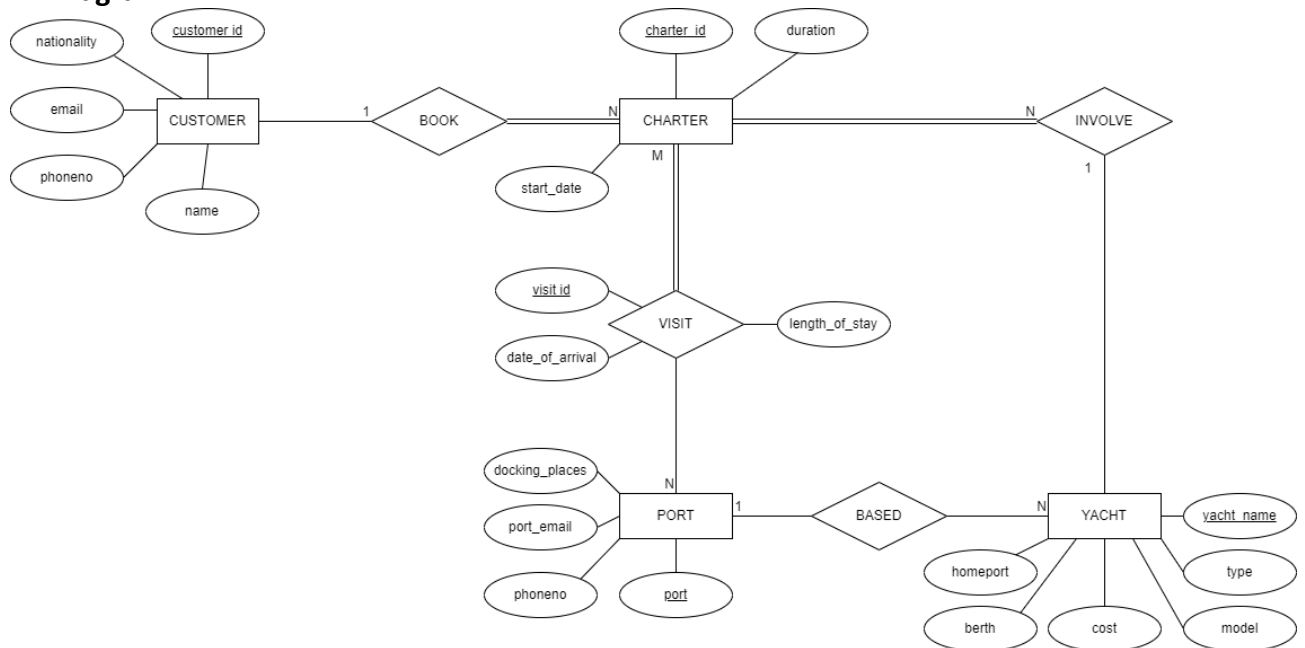
Assignment Report

Design and Implementation of a Database to Support a Yacht Charter Company

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1. Entity Relationship Modelling

1.1. ER Diagram



1.2. Justification of Cardinality Ratios

- CUSTOMERS to CHARTER Relationship

Cardinality: One-to-Many

Justification: Each customer can charter multiple yachts, but each charter is specific to one customer.

- YACHT to CHARTER Relationship

Cardinality: One-to-Many

Justification: A yacht can be involved in several charters over time, though each specific charter is associated with just one yacht.

- CHARTER to VISIT Relationship

Cardinality: One-to-Many

Justification: A single charter can include visits to multiple ports, but each visit is linked to one particular charter.

- PORT to VISIT Relationship

Cardinality: One-to-Many

Justification: Multiple visits can occur at the same port, but each visit corresponds to one unique port.

- PORT to YACHT (via homeport in YACHT) Relationship

Cardinality: One-to-Many

Justification: Several yachts can list one port as their homeport, but each yacht is assigned to only one homeport.

1.3. Justification of Participation Constraints

Customers - Charter:

Minimum Participation: 0 (a customer may not have any charters)

Maximum Participation: Many (a customer can have multiple charters)

Yacht - Charter:

Minimum Participation: 0 (a yacht might not be booked in any charters)

Maximum Participation: Many (a yacht can be booked for many charters)

Port – Visit:

Minimum Participation: 0 (a port may not receive any visits)

Maximum Participation: Many (a port can receive many visits)

Charter - Visit:

Minimum Participation: 0 (a charter may not include any port visits)

Maximum Participation: Many (a charter can include many port visits)

1.4. Entities and Attributes

- CUSTOMERS

- Attributes: customer_id, name, email, nationality, phoneno

- PORT

- Attributes: port, port_phone_no, port_email, docking_places

- YACHT

- Attributes: yacht_name, type, model, cost, berth, homeport

- CHARTER

- Attributes: charter_id, customer_id*, yacht_name*, duration, start_date

- VISIT
- Attributes: visit_id, date_of_arrival, length_of_stay, port*, charter_id*

1.5. Discussion of Limitations and Assumptions

Limitations:

No Default Values:

Since no defaults are set, missing data can cause errors when adding new records.

No Automatic Deletion:

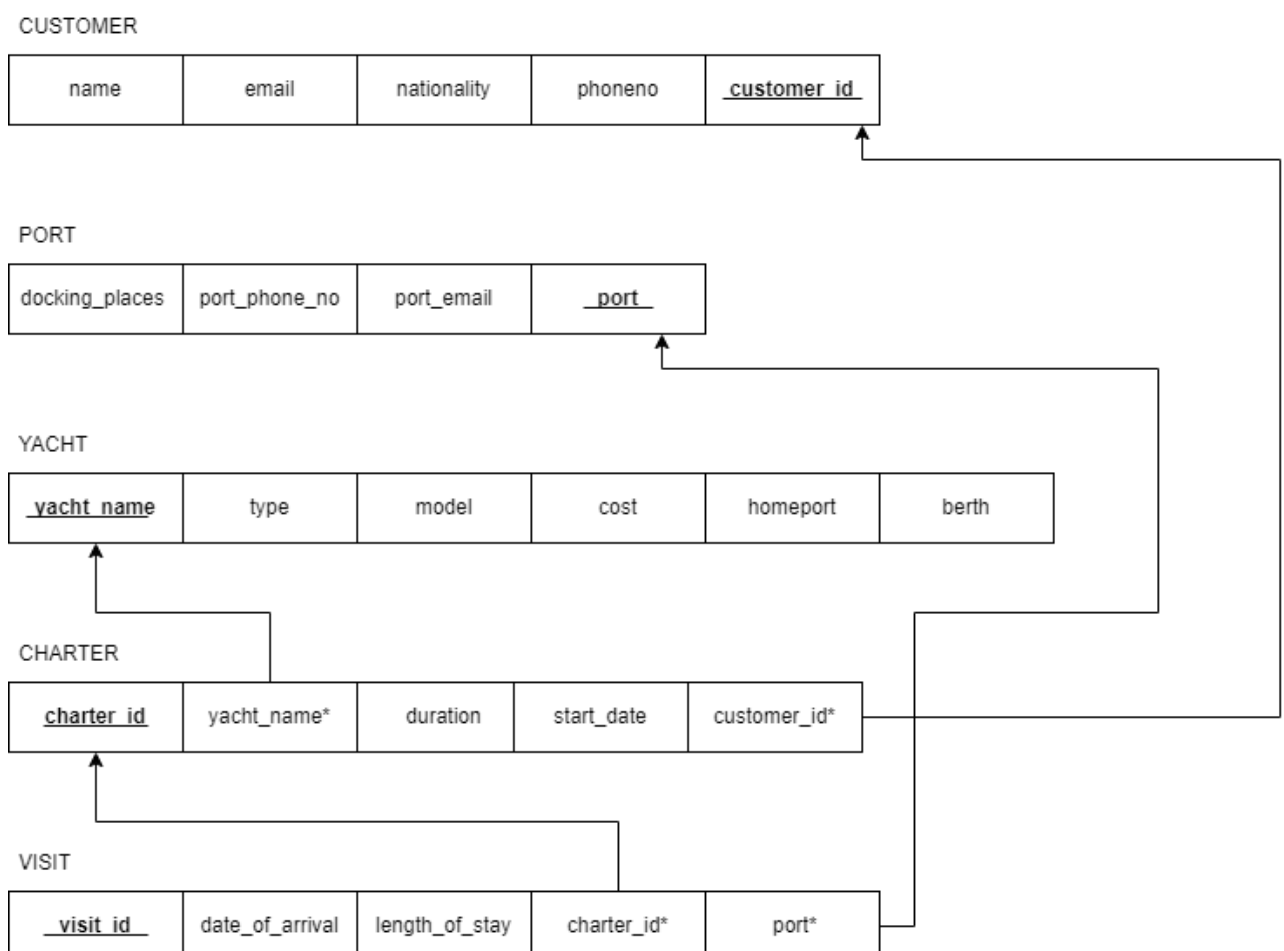
Removing parent records doesn't automatically clean up linked data, requiring manual cleanup.

Assumptions:

For adding a new customer and booking without specifying the yacht or ports, the system should allow nullable fields for YachtName. However, this attribute is a primary key. So, we can add an 'UNKNOWN' yacht temporarily to add the yacht name. When the yacht becomes available for the customer, we will change it in the future.

2. Relational Schema and Consideration of Normalisation

2.1. Relational Schema



2.2. Choice of Datatypes

For Customer table

- customer_id VARCHAR(7): Combination of letter and number
- name VARCHAR(17)
- email VARCHAR(24)
- nationality VARCHAR(21)
- phoneno VARCHAR(15) : Contains symbol (+) and numbers

For Port table

- Port VARCHAR(10)
- port_phone_no VARCHAR(16)
- port_email VARCHAR(35)
- docking_places INT

For Yacht table

- yacht_name VARCHAR(11)
- Type VARCHAR(9)
- Model VARCHAR(14)
- Homeport VARCHAR(9)
- berth_INT
- cost DECIMAL(10, 2): Holds the precise cost of chartering a yacht, allowing values up to 10 digits with 2 decimal places.

For Charter Table

- charter_id VARCHAR(6): Combination of letter and number
- duration INT
- start_date DATE

For Visit Table

- visit_id VARCHAR(4): Combination of letter and number
- date_of_arrival DATE
- length_of_stay INT

2.3. Normalisation

First Normal Form (1NF):

Primary Key Identification : Each table has a primary key that uniquely identifies each record:

- **customer_id** in the **CUSTOMERS** table,
 - **port** in the **PORT** table,
 - **yacht_name** in the **YACHT** table,
 - **charter_id** in the **CHARTER** table,
 - **visit_id** in the **VISIT** table.
- **Atomic Values**: Each column in all tables stores atomic values. There are no repeating groups or arrays.

Second Normal Form (2NF):

- **Elimination of Partial Dependency**: Each non-key attribute in every table is fully functionally dependent on the primary key. This means:

- In the **CHARTER** table, attributes such as **duration**, **start_date**, **customer_id**, and **yacht_name** are fully dependent on the **charter_id** (primary key).
- In the **VISIT** table, **date_of_arrival**, **length_of_stay**, **port**, and **charter_id** are all dependent on **visit_id** (primary key).

Third Normal Form (3NF):

- **Elimination of Transitive Dependency**: Attributes in each table are non-transitively dependent on the primary key. For instance:

- In the **YACHT** table, **type**, **model**, **cost**, **berth**, and **homeport** are each dependent directly on **yacht_name** (primary key) and not through another attribute.
- In the **CUSTOMERS** table, **name**, **email**, **nationality**, and **phoneno** are each dependent directly on **customer_id** (primary key) and not through another attribute.

3. Database Construction

1. Primary Keys:

Every table has a primary key constraint to uniquely identify each record.

- CUSTOMERS: customer_id
- PORT: port
- YACHT: yacht_name
- CHARTER: charter_id
- VISIT: visit_id

These primary keys ensure that no two entries have the same identifier

2. Foreign Keys:

Foreign key constraints link related tables to ensure consistency between them.

- CHARTER has foreign keys **customer_id** and **yacht_name**
- VISIT has foreign keys **port** and **charter_id**

3. ON DELETE Clauses:

- No special ON DELETE rules are included, so deleting a parent record won't automatically delete related records.

4. Default Values:

No default values are set, meaning all fields need explicit data for clarity.

4. Analysis and Interpretation

Questions 1 -

```
In [17]: %%sql
INSERT INTO CUSTOMERS (customer_id, name, nationality, email, phoneno)
VALUES ('D13-979', 'IbrahimSharker', 'Bangladeshi', 'ibrahimsharker@gmail.co

INSERT INTO YACHT (yacht_name, type, model, cost, berth, homeport)
VALUES ('TBD', 'Temporary', 'Placeholder', 0.00, 0, 'Unknown');

INSERT INTO CHARTER (charter_id, customer_id, yacht_name, duration, start_da
VALUES ('CH-979', 'D13-979', 'TBD', 7, '2018-10-01');

* mysql+mysqlconnector://root:***@localhost/YachtCharter
1 rows affected.
1 rows affected.
1 rows affected.

Out[17]: []
```

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```
In [19]: %%sql
SELECT * FROM yachtcharter.customers;

* mysql+mysqlconnector://root:***@localhost/YachtCharter
12 rows affected.
```

```
Out[19]:
```

customer_id	name	email	nationality	phoneno
D13-101	Bette Davis	bette.davis@ulster.ac.uk	American	41728003
D13-203	Cary Grant	bigcary@yahoo.com	British	+44417654321
D13-306	William Holden	billyho66@yahoo.com	Irish	+38198322843
D13-42	Humphrey Bogart	bogieh@gmail.com	American	07782751839
D13-51	Ingrid Bergman	IngridB@hotmail.com	Swedish	02890123456
D13-979	IbrahimSharker	ibrahimsharker@gmail.com	Bangladeshi	+123456789
D13-999	Ibrahim	ibrahim@gmail.com	Bangladeshi	0012345670
D13-R20	Jean Harlow	jeanh99@gmail.com	German	005866419887654
D13-R93	John Wayne	john.wayne@ulster.ac.uk	South African	02890112233
D14-38	Katharine Hepburn	kath_hep29@hotmail.com	Irish	00447880708090
D17-022	Marilyn Monroe	marilyn@hotmail.com	French	+88487618356732
DXX-YYY	New Customer	new_customer@example.com	Nationality	+123456789

Question 2:

```
In [10]: %%sql
SELECT port, SUM(length_of_stay) AS total_length_of_stay
FROM VISIT
WHERE date_of_arrival BETWEEN '2018-07-01' AND '2018-08-31'
GROUP BY port;
```

```
* mysql+mysqlconnector://root:***@localhost/YachtCharter
26 rows affected.
```

```
Out[10]:
```

port	total_length_of_stay
Athens	5
Barcelona	2
Bodrum	2
Cadiz	1
Cagliari	3
Cannes	1
Cartagena	3
Dénia	0
Genoa	2
Heraklion	3
Izmir	1
Kusadasi	0
Lisbon	4
Magaluf	1
Malaga	4
Marmaris	0
Marseilles	1
Monaco	3
Montpelier	2
Naples	3
Palermo	1
Palma	4
Paphos	5
St Tropez	4
Tangier	2
Valencia	2

Question 3:

```
In [8]: %%sql
SELECT Y.yacht_name, V.date_of_arrival, V.length_of_stay
FROM VISIT V
JOIN CHARTER C ON V.charter_id = C.charter_id
JOIN YACHT Y ON C.yacht_name = Y.yacht_name
WHERE Y.homeport = V.port AND V.date_of_arrival BETWEEN '2018-07-01' AND '2018-07-31'
ORDER BY V.date_of_arrival;
```

```
* mysql+mysqlconnector://root:***@localhost/YachtCharter
9 rows affected.
```

```
Out[8]:
```

yacht_name	date_of_arrival	length_of_stay
Serenity	2018-07-02	1
Mad Hatter	2018-07-05	1
Windsong	2018-07-06	0
Orion	2018-07-11	0
Wind Dancer	2018-07-12	1
Serendipity	2018-07-22	1
Serenity	2018-07-23	0
Windsong	2018-07-29	0
Orion	2018-07-30	0

Question 4:

```
In [21]: %%sql
SELECT V.port, V.date_of_arrival, V.length_of_stay
FROM VISIT V
JOIN CHARTER C ON V.charter_id = C.charter_id
WHERE C.customer_id = 'D13-42'
ORDER BY V.date_of_arrival;
```

```
* mysql+mysqlconnector://root:***@localhost/YachtCharter
7 rows affected.
```

```
Out[21]:
```

port	date_of_arrival	length_of_stay
Genoa	2018-07-02	1
Barcelona	2018-07-05	1
St Tropez	2018-07-07	2
Palma	2018-07-09	3
Monaco	2018-07-13	1
Cartagena	2018-07-16	1
Valencia	2018-07-22	2

```
In [ ]:
```

Question 5:

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```
In [13]: %%sql
ALTER TABLE YACHT
ADD COLUMN status VARCHAR(12) DEFAULT 'Available';

UPDATE YACHT
SET status = 'Unavailable'
WHERE yacht_name = 'Windsong';

SELECT yacht_name FROM YACHT
WHERE status = 'Unavailable';

* mysql+mysqlconnector://root:***@localhost/YachtCharter
0 rows affected.
1 rows affected.
1 rows affected.
```

```
Out[13]: 

| yacht_name |
|------------|
| Windsong   |


```

```
In [14]: %%sql
SELECT yacht_name, status
FROM YACHT
WHERE yacht_name = 'Windsong';

* mysql+mysqlconnector://root:***@localhost/YachtCharter
1 rows affected.
```

```
Out[14]: 

| yacht_name | status      |
|------------|-------------|
| Windsong   | Unavailable |


```

5. Appendix – SQL Code

```

CREATE DATABASE IF NOT EXISTS YachtCharter;
USE YachtCharter;

CREATE TABLE CUSTOMERS (
    customer_id VARCHAR(7) NOT NULL,
    name VARCHAR(17),
    email VARCHAR(24),
    nationality VARCHAR(21),
    phoneno VARCHAR(15),
    CONSTRAINT customers_pk PRIMARY KEY (customer_id)
);

CREATE TABLE PORT (
    port VARCHAR(10) NOT NULL,
    port_phone_no VARCHAR(16),
    port_email VARCHAR(35),
    docking_places INT,
    CONSTRAINT port_pk PRIMARY KEY (port)
);

CREATE TABLE YACHT (
    yacht_name VARCHAR(11) NOT NULL,
    type VARCHAR(9),
    model VARCHAR(14),
    cost DECIMAL(10, 2),
    berth INT,
    homeport VARCHAR(9),
    CONSTRAINT yacht_name_pk PRIMARY KEY (yacht_name)
);

CREATE TABLE CHARTER (
    charter_id VARCHAR(6) NOT NULL,
    customer_id VARCHAR(7) NOT NULL,
    yacht_name VARCHAR(11) NOT NULL,
    duration INT,
    start_date DATE,
    CONSTRAINT charter_pk PRIMARY KEY (charter_id),
    CONSTRAINT customer_id_fk FOREIGN KEY (customer_id) REFERENCES CUSTOMERS
(customer_id),
    CONSTRAINT yacht_name_fk FOREIGN KEY (yacht_name) REFERENCES YACHT
(yacht_name)
);

CREATE TABLE VISIT (
    visit_id VARCHAR(4) NOT NULL,
    date_of_arrival DATE,
    length_of_stay INT,
    port VARCHAR(10) NOT NULL,
    charter_id VARCHAR(6) NOT NULL,
    CONSTRAINT visit_pk PRIMARY KEY (visit_id),
    CONSTRAINT port_fk FOREIGN KEY (port) REFERENCES PORT (port),
    CONSTRAINT charter_id_fk FOREIGN KEY (charter_id) REFERENCES CHARTER
(charter_id)
);

INSERT INTO CUSTOMERS (customer_id, name, nationality, email, phoneno) VALUES
('D13-R20', 'Jean Harlow', 'German', 'jeanh99@gmail.com', '005866419887654'),
('D17-022', 'Marilyn Monroe', 'French', 'marilyn@hotmail.com',
'+88487618356732'),
('D13-101', 'Bette Davis', 'American', 'bette.davis@ulster.ac.uk', '41728003'),
('D13-203', 'Cary Grant', 'British', 'bigcary@yahoo.com', '+44417654321'),

```

```
('D13-42', 'Humphrey Bogart', 'American', 'bogieh@gmail.com', '07782751839'),
('D13-306', 'William Holden', 'Irish', 'billyho66@yahoo.com', '+38198322843'),
('D14-38', 'Katharine Hepburn', 'Irish', 'kath_hep29@hotmail.com',
'00447880708090'),
('D13-R93', 'John Wayne', 'South African', 'john.wayne@ulster.ac.uk',
'02890112233'),
('D13-51', 'Ingrid Bergman', 'Swedish', 'IngridB@hotmail.com', '02890123456');
```

```
INSERT INTO PORT (port, port_phone_no, port_email, docking_places) VALUES
('Genoa', '+3984774025', 'genoa667@genoaadmin.co.it', 160),
('Kusadasi', '+9045204295', 'Kusadasi_harbour@hotmail.co.tr', 96),
('Barcelona', '+34(0)8892436767', 'harbourmaster@barcelona_marina.com', 211),
('Marmaris', '+90(0)62228138', NULL, 69),
('Perpignan', '+3373600125', NULL, 88),
('Paphos', '+35788301000', 'paphosmariana@cyprusports.cy', 47),
('Monaco', '0037788356302', 'mariana@monacoport.mc', 104),
('Dénia', '+90229453883', 'denia_port@denia_port.com', 31),
('St Tropez', NULL, 'master@sttropezmarina.fr', 239),
('Cartagena', '+34(0)62045005', NULL, 21),
('Palma', '+3494955320', NULL, 74),
('Marseilles', '+3330026016', 'marseilles_port@france_ports.fr', 92),
('Malaga', '+3430336117', 'harbour_master@malagaport.com', 198),
('Heraklion', NULL, 'herp@heraklioncity.co.gr', 85),
('Athens', '+3014936640', 'paays7@athensport.gr', 106),
('Valencia', '+3483884002', NULL, 74),
('Izmir', '009062602105', NULL, 93),
('Cagliari', '+3963660326', 'ettwu7@gmail.com', 40),
('Naples', '+3990583686', NULL, 132),
('Palermo', '+3922746104', 'ggift4@visitpalermo.co.it', 57),
('Bodrum', '+9099264831', NULL, 89),
('Lisbon', '0035144700212', NULL, 79),
('Magaluf', NULL, 'maghar@maghar.com', 88),
('Cadiz', '+34(0)18128403', NULL, 90),
('Montpellier', '+33(0)51411947', NULL, 79),
('Cannes', '+3366295633', 'cannes.marina@yahoo.com', 148),
('Tangier', '+21245936724', 'tan778@tangierport.com', 63);
```

```
INSERT INTO YACHT (yacht_name, type, model, homeport, berth, cost) VALUES
('Serendipity', 'Monohull', 'Catalina 350', 'Genoa', 9, 2995.92),
('Second Wind', 'Catamaran', 'MacGregor 26X', 'Kusadasi', 8, 1063.45),
('Mad Hatter', 'Monohull', 'Jeanneau 42 DS', 'Barcelona', 4, 869.45),
('Serenity', 'Powered', 'Ranger 28', 'Genoa', 11, 2294),
('Windsong', 'Catamaran', 'MacGregor 26X', 'Dénia', 7, 1352.9),
('Orion', 'Powered', 'Ranger 28', 'Marmaris', 9, 2309.56),
('Wind Dancer', 'Monohull', 'Jeanneau 42 DS', 'Barcelona', 4, 892.4),
('Escape', 'Monohull', 'Beneteau 373', 'Kusadasi', 10, 3016.34);
```

```
INSERT INTO CHARTER (charter_id, duration, yacht_name, customer_id, start_date)
VALUES
('CH-033', 7, 'Serendipity', 'D13-R20', '2018-06-17'),
('CH-032', 36, 'Second Wind', 'D17-022', '2018-06-24'),
('CH-027', 7, 'Mad Hatter', 'D13-101', '2018-06-25'),
('CH-034', 18, 'Serendipity', 'D13-203', '2018-06-30'),
('CH-036', 14, 'Serenity', 'D13-42', '2018-07-02'),
('CH-028', 21, 'Mad Hatter', 'D13-42', '2018-07-05'),
('CH-043', 10, 'Windsong', 'D13-306', '2018-07-06'),
('CH-030', 14, 'Orion', 'D13-R20', '2018-07-11'),
('CH-039', 7, 'Wind Dancer', 'D13-101', '2018-07-12'),
('CH-035', 10, 'Serendipity', 'D13-R20', '2018-07-22'),
('CH-037', 21, 'Serenity', 'D14-38', '2018-07-23'),
```

```
( 'CH-044', 35, 'Windsong', 'D13-306', '2018-07-29'),
( 'CH-031', 10, 'Orion', 'D13-101', '2018-07-30'),
( 'CH-029', 14, 'Mad Hatter', 'D13-R93', '2018-08-05'),
( 'CH-040', 10, 'Wind Dancer', 'D17-022', '2018-08-10'),
( 'CH-038', 7, 'Serenity', 'D13-203', '2018-08-18'),
( 'CH-041', 7, 'Wind Dancer', 'D13-51', '2018-08-23'),
( 'CH-026', 14, 'Escape', 'D13-51', '2018-08-25'),
( 'CH-042', 15, 'Wind Dancer', 'D14-38', '2018-09-06'),
( 'CH-045', 21, 'Windsong', 'D13-203', '2018-09-06');
```

```
INSERT INTO VISIT (visit_id, date_of_arrival, length_of_stay, charter_id, port)
VALUES
```

```
('V101', '2018-06-17', 0, 'CH-033', 'Genoa'),
('V102', '2018-06-24', 0, 'CH-032', 'Kusadasi'),
('V103', '2018-06-25', 0, 'CH-027', 'Barcelona'),
('V104', '2018-06-27', 1, 'CH-032', 'Marmaris'),
('V105', '2018-06-29', 1, 'CH-027', 'Perpignan'),
('V106', '2018-06-30', 1, 'CH-034', 'Genoa'),
('V107', '2018-07-02', 1, 'CH-036', 'Genoa'),
('V108', '2018-07-04', 3, 'CH-032', 'Paphos'),
('V109', '2018-07-04', 2, 'CH-034', 'Monaco'),
('V110', '2018-07-05', 1, 'CH-028', 'Barcelona'),
('V111', '2018-07-06', 0, 'CH-043', 'Dénia'),
('V112', '2018-07-07', 2, 'CH-036', 'St Tropez'),
('V113', '2018-07-08', 1, 'CH-043', 'Cartagena'),
('V114', '2018-07-09', 3, 'CH-028', 'Palma'),
('V115', '2018-07-10', 1, 'CH-034', 'Marseilles'),
('V116', '2018-07-11', 0, 'CH-030', 'Marmaris'),
('V117', '2018-07-11', 3, 'CH-043', 'Malaga'),
('V118', '2018-07-12', 1, 'CH-039', 'Barcelona'),
('V119', '2018-07-13', 1, 'CH-032', 'Heraklion'),
('V120', '2018-07-13', 1, 'CH-036', 'Monaco'),
('V121', '2018-07-15', 1, 'CH-034', 'St Tropez'),
('V122', '2018-07-16', 1, 'CH-028', 'Cartagena'),
('V123', '2018-07-16', 2, 'CH-030', 'Paphos'),
('V124', '2018-07-19', 3, 'CH-032', 'Athens'),
('V125', '2018-07-21', 1, 'CH-030', 'Heraklion'),
('V126', '2018-07-22', 2, 'CH-028', 'Valencia'),
('V127', '2018-07-22', 1, 'CH-035', 'Genoa'),
('V128', '2018-07-23', 1, 'CH-032', 'Izmir'),
('V129', '2018-07-23', 0, 'CH-037', 'Genoa'),
('V130', '2018-07-26', 1, 'CH-035', 'Cagliari'),
('V131', '2018-07-26', 1, 'CH-037', 'Naples'),
('V132', '2018-07-29', 0, 'CH-044', 'Dénia'),
('V133', '2018-07-30', 0, 'CH-031', 'Marmaris'),
('V134', '2018-07-30', 1, 'CH-035', 'Naples'),
('V135', '2018-07-31', 1, 'CH-037', 'Palermo'),
('V136', '2018-08-02', 1, 'CH-044', 'Malaga'),
('V137', '2018-08-03', 1, 'CH-031', 'Heraklion'),
('V138', '2018-08-05', 0, 'CH-029', 'Barcelona'),
('V139', '2018-08-05', 2, 'CH-037', 'Cagliari'),
('V140', '2018-08-06', 2, 'CH-031', 'Bodrum'),
('V141', '2018-08-07', 4, 'CH-044', 'Lisbon'),
('V142', '2018-08-10', 1, 'CH-029', 'Cartagena'),
('V143', '2018-08-10', 1, 'CH-037', 'Naples'),
('V144', '2018-08-10', 0, 'CH-040', 'Barcelona'),
('V145', '2018-08-13', 1, 'CH-040', 'St Tropez'),
('V146', '2018-08-15', 1, 'CH-029', 'Magaluf'),
('V147', '2018-08-15', 1, 'CH-044', 'Cadiz'),
('V148', '2018-08-17', 1, 'CH-040', 'Montpelier'),
('V149', '2018-08-18', 0, 'CH-038', 'Genoa'),
('V150', '2018-08-22', 1, 'CH-038', 'Cannes'),
```

```
('V151', '2018-08-22', 2, 'CH-044', 'Tangier'),  
( 'V152', '2018-08-23', 0, 'CH-041', 'Barcelona'),  
( 'V153', '2018-08-25', 0, 'CH-026', 'Kusadasi'),  
( 'V154', '2018-08-27', 1, 'CH-041', 'Montpellier'),  
( 'V155', '2018-08-27', 1, 'CH-044', 'Palma'),  
( 'V156', '2018-08-29', 2, 'CH-026', 'Athens'),  
( 'V157', '2018-09-05', 1, 'CH-026', 'Izmir'),  
( 'V158', '2018-09-06', 0, 'CH-042', 'Barcelona'),  
( 'V159', '2018-09-06', 1, 'CH-045', 'Dénia'),  
( 'V160', '2018-09-08', 1, 'CH-042', 'Magaluf'),  
( 'V161', '2018-09-10', 2, 'CH-042', 'Cartagena'),  
( 'V162', '2018-09-12', 2, 'CH-045', 'Barcelona'),  
( 'V163', '2018-09-15', 1, 'CH-042', 'Dénia'),  
( 'V164', '2018-09-17', 2, 'CH-045', 'Montpellier'),  
( 'V165', '2018-09-18', 1, 'CH-042', 'Magaluf'),  
( 'V166', '2018-09-23', 1, 'CH-045', 'Magaluf');
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