-- 1. Booking tickets

```
INSERT INTO Client(phoneNo) VALUES
(44903456789)
```

```
phoneNo
---------------
44903456789
44913456789
44923456789
44933456789
44943456789
44953456789
44963456789
44973456789
44983456789
44993456789

(10 rows affected)

Completion time: 2021-12-12T23:45:01.5067366+02:00
```

```
INSERT INTO Booking(bookingNo, bookingDate, expireDate, noOfTickets, bookingStatus, eventId,
clientPhoneNo) VALUES
(12,'2022-01-11', '2022-01-14', 2, 'B', 3, 44903456789)
```

bookingNo	bookingDate	expireDate	noOfTickets	bookingStatus	eventId	clientPhoneNo
12	2022-01-11	2022-01-14	2	B	3	44903456789

```
(1 row affected)

Completion time: 2021-12-12T23:48:35.0258795+02:00
```

--2. Changing the number of tickets in a booking
```
UPDATE Booking SET noOfTickets = 10 WHERE bookingNo = 3
```

bookingNo	bookingDate	expireDate	noOfTickets	bookingStatus	eventId	clientPhoneNo
3	2022-01-15	2022-01-18	10	P	2	44973456789

```
(1 row affected)

Completion time: 2021-12-12T23:46:30.6580793+02:00
```

--3. Cancelling a ticket booking
```
UPDATE Booking SET bookingStatus = 'C' WHERE bookingNo = 5
```

bookingNo	bookingDate	expireDate	noOfTickets	bookingStatus	eventId	clientPhoneNo

```
----------- ----------- ---------- ----------- ------------- ----------- --------------
5           2022-01-02  2022-01-05 1           C             1           44913456789
```

(1 row affected)

Completion time: 2021-12-12T23:49:48.6874551+02:00

--4. Changing the status of booking to sold when tickets are purchased(the booking is payed for)
UPDATE Booking SET bookingStatus = 'P' WHERE bookingNo = 7

```
bookingNo   bookingDate expireDate noOfTickets bookingStatus eventId     clientPhoneNo
----------- ----------- ---------- ----------- ------------- ----------- --------------
7           2022-01-02  2022-01-05 1           P             3           44933456789
```

(1 row affected)

Completion time: 2021-12-12T23:53:21.9588955+02:00

--5. Removing unpurchased bookings from the database after three days from booking
DELETE FROM Booking WHERE bookingStatus = 'B' AND expireDate < (SELECT CAST(GETDATE() AS DATE))

--6. Cancelling an event(in an extreme exceptional case)
UPDATE Event SET status = 'C' WHERE eventId = 2
```
eventId     eventName                   eventDate  price       status venueId
----------- --------- ------------------------------ ------ -----------
2           Yorkshire Yodelling   2022-02-25 19.99      C      2
```

(1 row affected)

Completion time: 2021-12-12T23:55:52.2851440+02:00

--7.Refunding a client in a case of a cancelled event.
UPDATE Booking SET bookingStatus = 'R' FROM Booking
JOIN Event ON Booking.eventId = Event.eventId
WHERE bookingStatus = 'P' AND Event.status = 'C'

(2 rows affected)

Completion time: 2021-12-12T23:59:54.3379513+02:00

--8. What is Doja Cat's contact email?
SELECT email FROM Artist WHERE fullName = 'Doja Cat'

```
email
--------------------------------------------------
dojacat@email.com
```

(1 row affected)

--9. How many tickets are there left for Land del Rey's concert on 5.9.2022?
-- Check artistId of Land del Reys--
SELECT artistId FROM Artist WHERE fullName = 'Land del Reys'
artistId

1
(1 row affected)

Completion time: 2021-12-13T00:01:20.0837846+02:00

-- Calculate the number of tickets available = Capacity - the number of purchsed tickets--
SELECT artistId FROM Artist WHERE fullName = 'Land del Reys' --1--
        -- Calculate the number of tickets available = Capacity - the number of purchsed and
booked tickets--
SELECT (SELECT SUM(Venue.capacity) FROM Venue
JOIN Event ON Event.venueId = Venue.venueId
JOIN Artist_Event ON Event.eventId = Artist_Event.eventId
WHERE Artist_Event.artistId = 1) - (SELECT COUNT(bookingStatus) FROM Booking
JOIN Artist_Event ON Artist_Event.eventId = Booking.eventId
WHERE (bookingStatus = 'B' OR bookingStatus = 'P') AND Booking.eventId = (SELECT
Artist_Event.eventId WHERE artistId = 1))

118
(1 row affected)

Completion time: 2021-12-13T00:29:59.6608273+02:00

--10. What dance performances are coming up this month?
SELECT Event.eventName, Event.eventDate FROM Event
WHERE eventDate < EOMONTH (GETDATE(),0) AND eventDate > GETDATE()

eventName   eventDate
-- ----------

(0 rows affected)

Completion time: 2021-12-13T00:31:37.5671698+02:00

--11. When will Olivia Rodrigo perform in Paisley and what are her special requests for
catering?
SELECT Event.eventDate, Artist.specialRequests FROM Event
JOIN Artist_Event ON (Artist_Event.eventId = Event.eventId)
JOIN Artist ON (Artist.artistId = Artist_Event.artistId)
WHERE Artist.fullName = 'Olivia Rodrigo' AND Event.eventDate > (SELECT CAST(GETDATE() AS DATE))

eventDate specialRequests
---------- --
2022-03-25 Must supply hazmat suit with christmas lights inside

(1 row affected)

--12 How many tickets have been sold this far to Dua Lipa's dance performance ''Stormbringer 2022" that takes place on 2.6.2022?
```
SELECT COUNT(*) AS "Duo Lipa Show" FROM Booking
JOIN Artist_Event ON (Artist_Event.eventId = Booking.eventId)
JOIN Artist   ON (Artist.artistId = Artist_Event.artistId)
WHERE Artist.fullName = 'Dua Lipa' AND Booking.bookingStatus = 'P'
```

```
Duo Lipa Show
-------------
2
```

(1 row affected)

Completion time: 2021-12-13T00:33:10.8187144+02:00

--13 How much money has the Paisley Event Association got from sold tickets this year?
```
WITH TempTable(price, noOfTickets)
AS (SELECT E1.price, COUNT(B1.bookingStatus)
FROM Event as E1
JOIN Booking AS B1 ON (E1.eventId = B1.eventId)
WHERE B1.bookingStatus = 'P'
GROUP BY E1.price)
SELECT SUM(price*noOfTickets) AS "Total"
FROM TempTable
```

```
Total
--------------------------------------
119.96
```

(1 row affected)

Completion time: 2021-12-13T00:33:39.5586278+02:00

-- 14 Which artist has sold the highest number of tickets this year. Please notice that the artist can have performed several times this year. All the artist's performances count here.

```
WITH TempT (artistId, noOfTickets)
AS ( SELECT AE.artistId, COUNT(B1.bookingStatus)
FROM Artist_Event AS AE
JOIN Booking AS B1 ON (B1.eventId = AE.eventId)
GROUP BY AE.artistId)
SELECT Artist.fullName AS "The arist with the best selling show" FROM Artist
JOIN TempT ON (Artist.artistId = TempT.artistId)
WHERE TempT.noOfTickets = (SELECT max(noOfTickets) FROM TempT)
```

```
The arist with the best selling show
--------------------------------------------------
Dua Lipa
```

(1 row affected)

Completion time: 2021-12-13T00:34:31.9476868+02:00