use db\_Athena;

GO

CREATE PROCEDURE GetAvailableRooms (@BookingDate DATE)

AS

BEGIN

-- Calculates the total booking time for each room on the specified date

WITH BookedTime AS (

SELECT

fld\_roomID,

SUM(DATEDIFF(MINUTE, fld\_startTime, fld\_endTime)) AS total\_booked\_time\_minutes

FROM

tbl\_booking

WHERE

fld\_date = @BookingDate

GROUP BY

fld\_roomID

)

-- Selects selected fields from 4 tables related to each other using INNER JOIN - these are to be presented when displaying available rooms

SELECT

tbl\_room.fld\_roomID,

tbl\_room.fld\_roomName,

tbl\_room.fld\_floor,

tbl\_room.fld\_roomMaxPersonCount,

tbl\_booking.fld\_bookingID,

--tbl\_booking.fld\_date,

--tbl\_booking.fld\_startTime,

--tbl\_booking.fld\_endTime,

tbl\_inventory.fld\_inventoryName,

tbl\_roomType.fld\_roomTypeName

FROM

tbl\_room

INNER JOIN tbl\_booking ON tbl\_room.fld\_roomID = tbl\_booking.fld\_roomID

INNER JOIN tbl\_roomInventory ON tbl\_room.fld\_roomID = tbl\_roomInventory.fld\_roomID

INNER JOIN tbl\_inventory ON tbl\_roomInventory.fld\_roomInventoryID = tbl\_inventory.fld\_inventoryID

INNER JOIN tbl\_roomType ON tbl\_room.fld\_roomTypeID = tbl\_roomType.fld\_roomTypeID

--LEFT JOIN BookedTime ON tbl\_room.fld\_roomID = BookedTime.fld\_roomID

-- Filters the results to include only rooms that are either not booked on the specified date or have a total booked time less than 8 hours (480 minutes)

WHERE

fld\_date = @BookingDate

AND COALESCE(BookedTime.total\_booked\_time\_minutes, 0) < 480

-- The available rooms are sorted by room name (ascending) and start time (ascending)

ORDER BY

tbl\_room.fld\_roomName, tbl\_booking.fld\_startTime ASC;

END;