```
REQ501) 회원은 누적 결제 금액을 조회 할 수 있어야 한다.
userID가 1인 회원의 누적 결제 금액 조회
SELECT sub.userID,
             SUM(sub.totalPrice) AS total_sum
FROM (
   SELECT u.userID, ri.totalPrice
                                                                                 14 -- REQSOI) 회원은 누적 결제 급역을 조회 할 수 있어야 된다.
15 -- userID가 1인 회원의 누적 결제 급역을 조회 할 수 있어야 된다.
16 SELECT sub.userID,
17 | SUM(sub.totalPrice) AS total_sum
18 FROM (
19 SELECT u.userID, ri.totalPrice
PROM USER u
11 LEFT OUTER JOIN recommendation or ON rr.userID = u.userID
12 LEFT OUTER JOIN reservinfo ri ON ri.reservationID = rr.reservationID
13 ) sub
14 WHERE sub.userID = 1
15 GROUP BY sub.userID;
   FROM USER u
       LEFT OUTER JOIN roomreservation rr ON
rr.userID = u.userID
        LEFT OUTER JOIN reservinfo ri ON
ri.reservationID = rr.reservationID
) sub
WHERE sub.userID = 1
GROUP BY sub.userID;
                                                                                     결과 #1 (1r × 2c)
                                                                                                 userID
                                                                                                                         total_sum
                                                                                           1
                                                                                                                   1
                                                                                                                                   50,000
```

```
REQ502) 회원은 지난 결제 이력을 조회 할 수 있어야 한다.
userID가 1인 회원의 결제 이력 조회
SELECT u.userID,
                             u.userName,
                             rr.reservationID,
                             rr.roomID,
                             ri.reservationDate,
                                                                                       58 -- 회원은 지난 결제 이력을 조회 할 수 있어야 한다.
59 -- userID가 1인 회원의 결제 이력 조회
60 SELECT u.userID,
61 u.userName,
62 rr.reservationID,
63 rr.roomID,
64 ri.reservationDate,
65 ri.totalPrice,
66 ri.payMate
68 FROM USER u
69 INNER JOIN roomreservation rr ON rr.userID = u.userID
70 INNER JOIN reservinfo ri ON ri.reservationID = rr.reservationID
71 INNER JOIN payment p ON p.reservationID = rr.reservationID
72 WHERE u.userID = 1;
                             ri.totalPrice,
                             ri.paymentCheck,
                             p.payDate
FROM USER u
INNER JOIN roomreservation rr ON rr.userID =
u.userID
INNER JOIN reservinfo ri ON ri.reservationID =
rr.reservationID
INNER JOIN payment p ON p.reservationID =
rr.reservationID
WHERE u.userID = 1;
                                                                                                                                               30000
20000
```

REQ601) 새로운 스터디룸(이름, 크기, 수용가능인원, 방번호)을 추가할 수 있다 roomID가 11이고 수용가능 인원이 60명인 'Party Room'인 방 추가 \_ 추가 전 방 조회 83 SELECT \* FROM room; select \* from room; 0.4 
 capacity
 price
 description
 rese

 2
 100
 Cozy room with a gueen bed and ocean view
 N

 4
 200
 Specious suite with two bedrooms and a kitchen
 N

 1
 80
 Single room with a single bed and dry view
 N

 2
 120
 Modern room with a kingle bed and dry view
 N

 3
 150
 Family room with a bunk bed and lays area
 N

 2
 110
 Deluxe room with a double bed and balcony
 N

 2
 99
 Standard room with a double bed and garden ...
 N

 1
 70
 Economy room with a single bed and on view
 N

 4
 250
 Lucury suite with a living room and jacuzzi
 N

 2
 130
 Executive room with a kingle bed and office space
 N
 추가하기 INSERT INTO room (roomID, roomNo, capacity, 84 -- 새로운 스틱디를(이름, 크기, 수용가능원을, 위치이당본프)를 추가할 수 있다 85 -- roomD7 11이크 수용가능 원들이 60명원 "Party Room"원 등 추가 86 INSERT INTO room (roomD), room(0), capacity, price, description, reservationCheck) VALUES 87 (11, 111, 60, '40000', 'Party Room', 'N'); price, description, reservationCheck) VALUES (11, 111, 60, '40000', 'Party Room', 'N'); 추가 후 방 조회 SELECT \* FROM room; 91 select \* from room; room (11r × 6c) 

REQ602) 데이터베이스에 저장된 모든 스터디룸을 조회	할 수 있다	
SELECT * FROM room;	90 데이터베이스에 저장된 모든 스터디움을 조회할 수 3 91 SELECT * FROM room;	2/ F
	room (11r × 6c)  \$ room\0 \( \begin{array}{cccccccccccccccccccccccccccccccccccc	:heck
	5 5 105 3 150 Family room with a bunk bed and play area N 6 6 6 106 2 110 Deluxe room with a double bed and balcony N	
	7 7 107 2 90 Standard room with a double bed and parden N 8 8 108 1 70 Economy room with a single bed and no view N	
	9 9 109 4 250 Luxury suite with a living room and jacuzzi N	
	10 10 110 2 130 Executive room with a king bed and office space N 11 11 111 60 40000 Party Room N	

```
REQ603) 기존의 스터디룸 정보를 수정할 수 있다
roomNo가 104인 스터디룸의 가격을 250원으로 수정
수정 전 104번 방 정보 조회
SELECT *
                                            97 SELECT *
FROM room
                                             98 FROM room
WHERE roomNo = 104;
                                           99 WHERE roomNo = 104;
UPDATE room
                                           100 -- 기존의 스터디룸 정보를 수정할 수 있다
101 -- roomNo가 104인 스터디룸의 가격을 250원으로 수정
102 UPDATE room
103 SET price = '250'
104 WHERE roomNo = '104';
SET price = '250'
WHERE roomNo = '104';
수정 후 104번 방 정보 조회
                                            106 SELECT *
SELECT *
                                            107 FROM room
FROM room
                                            108 WHERE roomNo = 104;
WHERE roomNo = 104;
```

REQ604) 특정 스터디룸을 삭제할 수 있다	
roomID가 4인 스터디룸 삭제	
삭제 전 스터디룸 조회	
SELECT * FROM room;	116 SELECT * FROM room;
DELETE FROM room WHERE roomID = 4;	111 특정 스터디움을 삭제할 수 있다 112 roomID가 4인 스터디움 삭제 113 DELETE 114 FROM room 115 WHERE roomID = 4;
삭제 후 스터디룸 조회	
SELECT * FROM room;	119 SELECT * FROM room;
	# room 10r x 6c)  # room D

```
v_roomreserv라는 뷰 생성
CREATE OR REPLACE VIEW v_roomreserv
AS SELECT u.userID,
                              u.email,
                              u.userPW.
                              u.userName,
                              u.userNo,
                              u.addr,
                              u.phone,
                                                                                          121 -- 데이터베이스에 저장된 모든 데약정보를 조회할 수 있다
122 -- v_roomreserv라는 # 성성
                              u.level,
                                                                                               -- v_roomreserv라는 # 생성

CREATE OR REPLACE VIEW v_roomreserv
                              rr.reservationID,
                                                                                               AS SELECT u.userID,
u.email,
u.userPW,
u.userName,
                              r.roomID,
                              r.roomNO.
                                                                                                       u.userNo,
                                                                                                      u.userNo,
u.addr,
u.phone,
u.level,
r.reservationID,
r.roomID,
r.roomNO,
r.capacity,
r.price,
r.description,
r.reservationCheck,
p.pavID,
                              r.capacity,
                              r.price,
                              r.description,
                              r.reservationCheck,
                              p.payID,
                              p.account,
                                                                                                        p.payID,
                                                                                                       p.payID,
p.account,
p.payDate,
ri.infoID,
ri.reservationDate,
ri.totalPrice,
ri.paymentCheck
                              p.payDate,
                              ri.infoID,
                              ri.reservationDate,
                                                                                          145
146
147
148
149
                                                                                               | | ri.paymentheck
FROM user u

LEFT OUTER JOIN roomreservation rr ON u.userID = rr.userID

LEFT OUTER JOIN room r ON r.roomID = rr.roomID

LEFT OUTER JOIN payment p ON p.reservationID = rr.reservationID

LEFT OUTER JOIN reservinfo ri ON ri.reservationID = rr.reservationID;
                              ri.totalPrice,
                              ri.paymentCheck
FROM user u
LEFT OUTER JOIN roomreservation rr ON u.userID
= rr.userID
LEFT OUTER JOIN room r ON r.roomID = rr.roomID
LEFT OUTER JOIN payment p ON p.reservationID
= rr.reservationID
LEFT OUTER JOIN reservinfo ri ON ri.reservationID
= rr.reservationID;
SELECT *
FROM v roomreserv;
```

REQ702) 데이터베이스에 저장된 모든 예약정보를 조회할 수 있다

REQ704) 기존의 예약 내역을 수정할 수 있다 reservationID가 5인 사람의 예약일을 2024년 5월 30일로 변경 수정 전 예약내역 조회 SELECT \* FROM roomreservation r 168 SELECT \*
169 FROM roomreservation r
170 LEFT OUTER JOIN reservinfo ri ON r.reservationID = ri.reservationID
171 LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID; LEFT OUTER JOIN reservinfo ri ON r.reservationID = ri.reservationID LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID; UPDATE reservinfo AS ri LEFT JOIN roomreservation AS r 158 -- 기존의 예약 정보를 수정할 수 있다
159 -- reservationID가 5인 사람의 예약일을 2024년 5월 30일로 변경
160 UPDATE reservinfo AS ri
161 LEFT JOIN roomreservation AS r
162 ON r.reservationID = ri.reservationID
163 LEFT JOIN payment AS p
164 ON p.reservationID = r.reservationID
165 SET reservationDate = '2024-05-30'
166 WHERE r.reservationID = 5; ON r.reservationID = ri.reservationID LEFT JOIN payment AS p ON p.reservationID = r.reservationID SET reservationDate = '2024-05-30' WHERE r.reservationID = 5; 수정 후 예약내역 조회 SELECT \* FROM roomreservation r LEFT OUTER JOIN reservinfo ri ON r.reservationID 169 FROM roomreservation r
170 LEFT OUTER JOIN reservinfo ri ON r.reservationID = ri.reservationID
171 LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID; = ri.reservationID LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID:

# reso	usert0 🖣		infoxo 💡	reservationDate 1 2024-05-20		paymentCheck N		9 account 1 1224567890	pay0ase 2024-05-20
2 3 4 5	1 5	3 5	2 2 3 3 5 5 3 6	2 2024-05-21 3 2024-05-22 5 2024-05-30 6 2024-05-25	45000 60000 90000 20000	N Y	3	2 2345678901 3 3456789012 5 5678901234 6 6789012345	2024-05-21 2024-05-22 2024-05-24 2024-05-25

```
REQ706) 회원은 예약한 스터디룸을 취소할 수 있다
reservationID가 3인 사람의 예약을 취소
스터디룸 취소 전 예약 내역 조회
SELECT u.userName,
                             u.phone,
                             r.reservationID,
                             ri.reservationDate.
                             ri.totalPrice.
                                                                                        185 SELECT u.userName,
                             ri.paymentCheck,
                                                                                                      u.phone,
r.reservationID,
ri.reservationDate,
ri.totalPrice,
                                                                                        186
187
                             p.payDate
                                                                                                      ri.paymentCheck,
FROM user u
                                                                                             | ri.paymentcheck,
| p.payDate
FROM user u
LEFT OUTER JOIN roomreservation r ON u.userID = r.userID
LEFT OUTER JOIN reservinfo ri ON r.reservationID = ri.reservationID
LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID;
                                                                                         191
192
193
LEFT OUTER JOIN roomreservation r ON u.userID
= r.userID
LEFT OUTER JOIN reservinfo ri ON r.reservationID
= ri.reservationID
LEFT OUTER JOIN payment p ON p.reservationID
= r.reservationID;
                                                                                        user (21r × 7c)
                                                                                                                                                                payDate
2024-05-20
2024-05-25
2024-05-21
2024-05-22
                                                                                                        phone
123-456-7890
123-456-7890
234-567-8901
345-678-9012
456-789-0123
567-890-1234
                                                                                                                                2024-05-20
2024-05-25
2024-05-21
2024-05-22
                                                                                                                          (NULL) (NULL)
5 2024-05-30
(NULL) (NULL)
                                                                                                                                                                2024-05-24
                                                                                                        567-890-1234

678-901-23456

789-012-3456

890-123-4567

901-234-5678

012-345-6789

123-4567-8901

345-678-9012

456-789-0123
                                                                                                                                                                (NULL)
                                                                                              Ashley
                                                                                                        567-890-1234
678-901-2345
                                                                                                                                 (NULL)
                                                                                                                                                                (NULL)
                                                                                              Ryan
Samantha
                                                                                                                                 (NULL)
                                                                                                                                                                 (NULL)
                                                                                                                                                                (NULL)
(NULL)
(NULL)
(NULL)
                                                                                                        789-012-3456
                                                                                                        890-123-4567
901-234-5678
012-345-6789
DELETE r, ri, p
FROM roomreservation AS r
                                                                                        175 -- 회원은 예약한 스터디쿰을 취소할 수 있다
                                                                                         176 -- reservationID가 3인 사람의 예약을 취소
177 DELETE r, ri, p
LEFT OUTER JOIN reservinfo AS ri
                                                                                         178 FROM roomreservation AS r
ON r.reservationID = ri.reservationID
                                                                                         179
                                                                                                 LEFT OUTER JOIN reservinfo AS ri
LEFT OUTER JOIN payment AS p
                                                                                         180 ON r.reservationID = ri.reservationID
                                                                                         181 LEFT OUTER JOIN payment AS p
ON p.reservationID = r.reservationID
                                                                                         182 ON p.reservationID = r.reservationID
183 WHERE r.reservationID = 3;
WHERE r.reservationID = 3;
스터디룸 취소 전 예약 내역 조회
```

```
SELECT u.userName,
                                                        u.phone,
                                                        r.reservationID,
                                                        ri.reservationDate,
                                                        ri.totalPrice,
                                                                                                                                                                         185 SELECT u.userName,
                                                        ri.paymentCheck,
                                                                                                                                                                                                     u.phone,
r.reservationID,
                                                                                                                                                                          186
187
188
189
190
191
192
193
194
195
                                                        p.payDate
                                                                                                                                                                                                    ri.reservationID,
ri.reservationDate,
ri.totalPrice,
ri.paymentCheck,
p.payDate
 FROM user u
                                                                                                                                                                                    | | p.payuate
FROM user u
LEFT OUTER JOIN roomreservation r ON u.userID = r.userID
LEFT OUTER JOIN reservinfo ri ON r.reservationID = ri.reservationID
LEFT OUTER JOIN payment p ON p.reservationID = r.reservationID;
LEFT OUTER JOIN roomreservation r ON u.userID
= r.userID
LEFT OUTER JOIN reservinfo ri ON r.reservationID
= ri.reservationID
LEFT OUTER JOIN payment p ON p.reservationID
= r.reservationID;
                                                                                                                                                                         user (21r × 7c)
                                                                                                                                                                                                                                           payDate
2024-05-20
2024-05-25
2024-05-21
(NULL)
                                                                                                                                                                                                        phone
123-456-7890
123-456-7890
234-567-89012
345-678-9012
456-789-0123-4567
890-123-4567
890-123-4567
890-123-4567
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890-123-4567
                                                                                                                                                                              N
Y
Y
(NULL)
                                                                                                                                                                                                                                                                                                                    2024-05-24
(NULL)
```

