

12.(1)

```
CREATE TABLE DEPT (  
  DEPTNO INT NOT NULL,  
  DNAME VARCHAR(14),  
  LOC VARCHAR(13),  
  PRIMARY KEY (DEPTNO)  
);
```

(2)

```
CREATE TABLE EMP (  
  EMPNO INT NOT NULL,  
  ENAME VARCHAR(10),  
  JOB VARCHAR(9),  
  MGR INT,  
  HIREDATE DATE,  
  SAL INT,  
  COMM INT,  
  DEPTNO INT,  
  PRIMARY KEY (EMPNO),  
  FOREIGN KEY (DEPTNO) REFERENCES DEPT(DEPTNO)  
);
```

(3)

```
INSERT INTO DEPT (deptno, dname, loc) VALUES  
(10, 'ACCOUNTING', 'NEW YORK'),  
(20, 'RESEARCH', 'DALLAS'),  
(30, 'SALES', 'CHICAGO'),  
(40, 'OPERATIONS', 'BOSTON');
```

(4)

```
INSERT INTO EMP (empno, ename, job, mgr, hiredate, sal, comm, deptno) VALUES  
(7369, 'SMITH', 'CLERK', 7902, '1920-12-17', 800, NULL, 20),  
(7499, 'ALLEN', 'SALESMAN', 7698, '1981-02-20', 1600, 300, 30),  
(7521, 'WARD', 'SALESMAN', 7698, '1981-02-22', 1250, 500, 30),  
(7566, 'JONES', 'MANAGER', 7839, '1981-04-02', 2975, NULL, 20);
```

(5)

```
INSERT INTO EMP (empno, ename, job, mgr, hiredate, sal, comm, deptno)
VALUES (7654, 'MARTIN', 'SALESMAN', 7698, '1981-09-28', 1250, 1400, 50);
```

(6)

```
SELECT ename, loc
FROM EMP, DEPT
WHERE EMP.deptno = DEPT.deptno;
```

(7)

```
ALTER TABLE DEPT
ADD managername VARCHAR(20);
```

```
UPDATE DEPT SET managername = 'KING' WHERE deptno = 10;
UPDATE DEPT SET managername = 'JONES' WHERE deptno = 20;
UPDATE DEPT SET managername = 'BLAKE' WHERE deptno = 30;
UPDATE DEPT SET managername = 'CLARK' WHERE deptno = 40;
```

13.

(1)

```
SELECT *
FROM cust_addr
WHERE custid = 1;
```

(2)

```
SELECT changeday, phone
FROM cust_addr
WHERE custid = 1;
```

(3)

```
SELECT phone
FROM cust_addr
WHERE custid = 1
ORDER BY changeday ASC
LIMIT 1;
```

(4)

```
SELECT phone
FROM cust_addr
WHERE custid = 1 AND changeday <= '2024-01-01'
```

```
ORDER BY changeday DESC  
LIMIT 1;
```

14.

(1)

```
SELECT DISTINCT b.bookname  
FROM cart c  
JOIN orders o ON c.bookid = o.bookid  
JOIN book b ON c.bookid = b.bookid  
WHERE c.custid = 1 AND o.custid = 1;
```

(2)

```
SELECT b.bookname  
FROM cart c  
JOIN book b ON c.bookid = b.bookid  
WHERE c.custid = 1  
AND c.bookid NOT IN (  
    SELECT bookid  
    FROM orders  
    WHERE custid = 1  
);
```

(3)

```
SELECT SUM(b.price) AS total_price  
FROM cart c  
JOIN book b ON c.bookid = b.bookid  
WHERE c.custid = 1;
```

15.

(1)1. SELECT 극장이름, 위치 FROM 극장;

2. SELECT 극장이름 FROM 극장 WHERE 위치 = '잠실';

3. SELECT 이름 FROM 고객 WHERE 주소 = '잠실' ORDER BY 이름 ASC;

4. SELECT 극장번호, 상영관번호, 영화제목 FROM 상영관 WHERE 가격 <= 8000;

5. SELECT 고객.* FROM 고객

JOIN 극장 ON 고객.주소 = 극장.위치;

(2)1. SELECT COUNT(*) FROM 극장;

2. SELECT AVG(가격) FROM 상영관;

3. SELECT COUNT(DISTINCT 고객번호)

FROM 예약

WHERE 날짜 = '2024-09-01';

(3)

1. SELECT 영화제목
FROM 상영관
WHERE 극장번호 = (SELECT 극장번호 FROM 극장 WHERE 극장이름 = '대한');
2. SELECT DISTINCT 고객.이름
FROM 고객
JOIN 예약 ON 고객.고객번호 = 예약.고객번호
WHERE 예약.극장번호 = (SELECT 극장번호 FROM 극장 WHERE 극장이름 = '대한');
3. SELECT SUM(가격)
FROM 상영관
WHERE 극장번호 = (SELECT 극장번호 FROM 극장 WHERE 극장이름 = '대한');

(4)

1. SELECT 극장번호, COUNT(*) AS 상영관수
FROM 상영관
GROUP BY 극장번호;
2. SELECT s.*
FROM 상영관 s
JOIN 극장 t ON s.극장번호 = t.극장번호
WHERE t.위치 = '잠실';
3. SELECT 극장번호, COUNT(DISTINCT 고객번호) / COUNT(DISTINCT 상영관번호) AS
평균관람수
FROM 예약
WHERE 날짜 = '2024-09-01'
GROUP BY 극장번호;
4. SELECT 영화제목, COUNT(*) AS 관람수
FROM 예약 r
JOIN 상영관 s ON r.극장번호 = s.극장번호 AND r.상영관번호 = s.상영관번호
WHERE r.날짜 = '2024-09-01'
GROUP BY 영화제목
ORDER BY 관람수 DESC
LIMIT 1;

(5)

1. INSERT INTO 극장 VALUES (4, 'CGV', '종로');
2. UPDATE 상영관
SET 가격 = 가격 * 1.1;