Q1. Create an Employee Table and solve the following Queries in SQL

Employee (emppi_id,emp_name,salary,join_date, dept_no)

1. How to get distinct records from the table without using distinct keyword.
2. Display the name of employees who have joined in 2016 and salary is greater than 10000?
3. Query to Find Second Highest Salary Of Employee using nested/ correlated queries?

Q2. Create an Employee Table and solve the following Queries in SQL

Employee (emppi_id,emp_name,salary,join_date, dept_no)

1. How to get 3 highest salaries records from Employee table?
2. Find Query to get information of Employee where Employee is not assigned to the department
3. Select all records from Employee table whose name is 'Amit' and 'Pradnya'

Q3. Consider the following tables EMP and SALGRADE, write the query for the following

TABLE: EMPLOYEE

ECODE	NAME	DESIG	SGRADE	DOJ	DOB
101	Vikrant	Executive	S03	2003-03-23	1980-01-13
102	Ravi	Head-IT	S02	2010-02-12	1987-07-22
103	John Cena	Receptionist	S03	2009-06-24	1983-02-24
105	Azhar Ansari	GM	S02	2009-08-11	1984-03-03
108	Priyam Sen	CEO	S01	2004-12-29	1982-01-19

TABLE: SALGRADE

SGRADE	SALARY	HRA
S01	56000	18000
S02	32000	12000
S03	24000	8000

1. To display details of all employee in descending order of their DOJ
2. To display NAME AND DESIG of those employees whose sgrade is either "S02" or "S03".
3. To display NAME, DESIG, SGRADE of those employee who joined in the year 2009
4. To display all SGRADE, ANNUAL_SALARY from table SALGRADE [where ANNUAL_SALARY = SALARY*12]
5. To display number of employee working in each SALGRADE from table EMPLOYEE

Q4. For a given EMPLOYEE table

EMPLOYEE	FNAME	MINIT	LNAME	SSN	BDATE	ADDRESS	SEX	SALARY	SUPERSSN	DNO
	John	B	Smith	123456789	1965-01-09	731 Fondren, Houston, TX	M	30000	333445555	5
	Franklin	T	Wong	333445555	1955-12-08	638 Voss, Houston, TX	M	40000	888665555	5
	Alicia	J	Zelaya	999887777	1968-07-19	3321 Castle, Spring, TX	F	25000	987654321	4
	Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000	888665555	4
	Ramesh	K	Narayan	666884444	1962-09-15	975 Fire Oak, Humble, TX	M	38000	333445555	5
	Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000	333445555	5
	Ahmad	V	Jabbar	987987987	1969-03-29	980 Dallas, Houston, TX	M	25000	987654321	4
	James	E	Borg	888665555	1937-11-10	450 Stone, Houston, TX	M	55000	null	1

Perform the Following -

1) Creating Views,

2) Selecting from a View

3) Dropping Views

Q5. Consider the following tables and perform joining queries

unit_dose_order_id	patient_id	dosage
1	9	0.25 MG
2	15	50 MG
3	18	15

"Unit_dose_orders" table

patient_id	first_name	last_name
1	Miyuki	Riviera
2	Deunan	Knute
3	Lois	McAllister

"patients" table

1. Perform inner join.
   SELECT * FROM patients p JOIN admissions a ON a.patient_id = p.patient_id

Q6. Briefly answer the following questions based on this schema:

Emp(eid: integer, ename: string, age: integer, salary: real)

Works(eid: integer, did: integer, pct time: integer)

Dept(did: integer, budget: real, managerid: integer)

1. Give an example of a view on Emp that could be automatically updated by updating Emp.
2. Give an example of a view on Emp that would be impossible to update (automatically) and explain why your example presents the update problem that it does

Q7.

Exercise 5.1 Consider the following relations:

Student(*snum:* `integer`, *sname:* `string`, *major:* `string`, *level:* `string`, *age:* `integer`)
Class(*name:* `string`, *meets_at:* `string`, *room:* `string`, *fid:* `integer`)
Enrolled(*snum:* `integer`, *cname:* `string`)
Faculty(*fid:* `integer`, *fname:* `string`, *deptid:* `integer`)

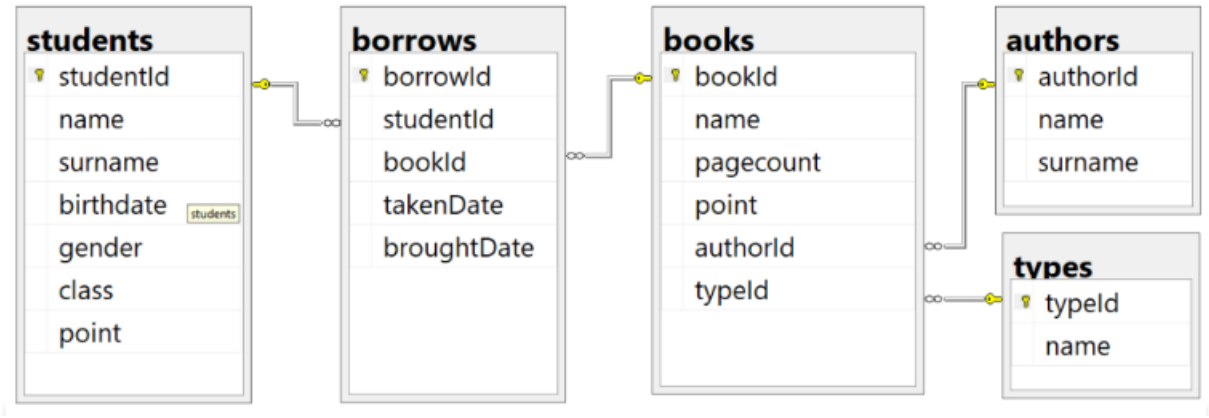
The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair such that the student is enrolled in the class.

Write the following queries in SQL. No duplicates should be printed in any of the answers.

1. Find the names of all Juniors (level = JR) who are enrolled in a class taught by I. Teach.
2. Find the age of the oldest student who is either a History major or enrolled in a course taught by I. Teach.
3. Find the names of all classes that either meet in room R128 or have five or more students enrolled.
4. Find the names of all students who are enrolled in two classes that meet at the same time.

5. Find the names of faculty members who teach in every room in which some class is taught.
6. Find the names of faculty members for whom the combined enrollment of the courses that they teach is less than five.
7. For each level, print the level and the average age of students for that level.
8. For all levels except JR, print the level and the average age of students for that level.
9. For each faculty member that has taught classes only in room R128, print the faculty member's name and the total number of classes she or he has taught.
10. Find the names of students enrolled in the maximum number of classes.
11. Find the names of students not enrolled in any class.
12. For each age value that appears in Students, find the level value that appears most often. For example, if there are more FR level students aged 18 than SR, JR, or SO students aged 18, you should print the pair (18, FR).

Q8. Consider the following tables for Library Management System.



1. List the books where page count bigger than 200
2. List the books where pageCount is between 100 and 200
3. List the boys from class 11a or 11b
4. List the students from class 11a or 11b
5. List the book which have biggest page count
6. List only the number of female students in each class.
7. List all students name, surname, the name of the taken book,the taken date and the book's type

Q9.

1. Create a Table as **workers** and the details are

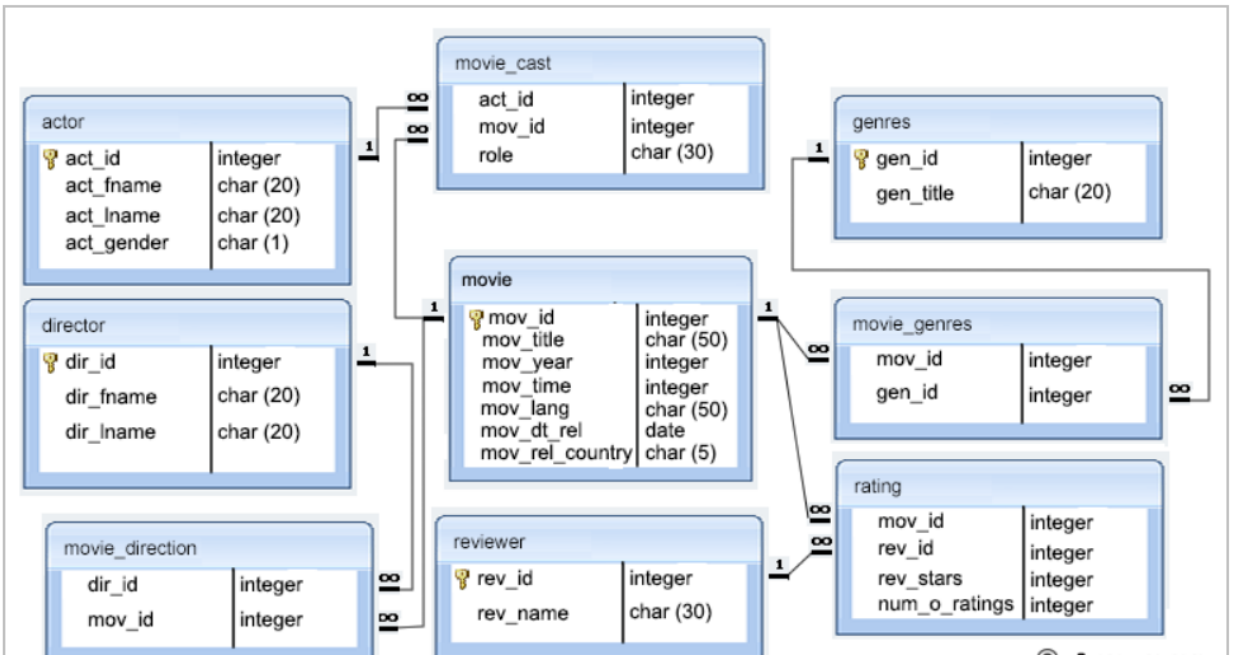
S.No	Name	Designation	Branch
1	Ram	Manager	Chennai
2	Santhosh	Supervisor	Madurai
3	Hari	Assistant	Trichy

Perform the following:

- Alter the table by adding a column **Salary**
- Alter the table by modifying the column **Name**
- Describe the table **employee**
- Copy the table **employee** as **emp**
- Truncate the table
- Delete the Second row from the table

Q10. Consider the following

Sample Database:



1. From the following table, write a SQL query to find out who was cast in the movie '3 Idiots'
2. Write a SQL query to find out which actors have not appeared in any movies between 1990 and 2000 .

3. From the following table, write a SQL query to find the directors who have directed films in a variety of genres. Group the result set on director first name, last name and generic title.
4. Write a SQL query to find the movies with year and genres. Return movie title, movie year and generic title.
5. Write a SQL query to find the movies released before 1st January 1989. Sort the result-set in descending order by date of release.