

# SQL Queries [Class Problems]

① Consider the following relational schema:

2018

EMPLOYEE (Eid, Ename, Date of Birth, Salary (DoB))  
DEPARTMENT (Dno, Dname, Location)

Write SQL commands for the following queries:

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- And all employees whose name start with 'A'.
- Find all employees of 'Marketing' Department.
- Find all departments located in Kolkata.
- Find all employees who earn salary between ₹30,000 to ₹80,000.

② Student (Sid, Sname, phone, College)  
Appears (Sid, eid, examcenter)

2017

- List names of all students who are appearing for any examination in exam-center 'XYZ College'.
- List all students who are appearing for any examination in 'Science' course.
- List names of distinct colleges in which students study.
- State the purposes of GROUP BY clause and ORDER BY clause in SQL with examples.

2016

③ Employee (employee\_name, street, city)

Works (employee\_name, company\_name, salary)

Company (company\_name, city)

- Find the names, street addresses and cities of all employees who work for State Bank of India and earn more than 30,000/-
- Find all employees in the database who do not work for State Bank of India.
- How does full outer join work? Illustrate with an example.

2015  
S-1

④ Employee (Eid, Ename, Address, Age, Salary, Did)  
Department (Did, Dname, Location)

- Find all employees of the HR Department who are more than 40 years old.
- Find name and address of all employees who get less than 10,000/- as salary per month.

2015  
S-2

⑤ Customer (custid, name, phno)  
car (carid, modelno, price)  
Purchase (custid, carid, date)

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- Display customer names who purchased the most costly car.
- Find the car which is purchased by "Mr. M. Rajan".

2015  
S-3

⑥ Employee (Empno, Name, Address, Salary)  
Department (Deptno, Deptname, DeptLocation)  
Works (Empno, Deptno, hours)

- Write an SQL statement to find the name and addresses of all employees who work for "Research" department.
- Write an SQL statement to find the names of the highest paid employees.

(1)

SQL-1

⑦ Consider the following SQL Queries [Year Problems] relational schema:

Employee (eid, ename, address, salary)

Company (cid, cname, city)

Work (eid, cid, projectname)

2014  
S-1

Write the SQL expression for the following queries:—

(i) Find the name of employee who get highest salary.

(ii) Find the name of employee who works in TCS.

⑧ Supplier (s#, sname, city, status)

Parts (p#, Pname, city, color, weight)

Shipment (s#, p#, qty)

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2014  
S-3

\* (a) Draw the ERD for this database schema also consider possible cardinality constraints.

(b) Write an SQL queries to find the supplier names who are supplying parts which are available in their own city.

(c) Write an SQL statements to find the supplier numbers who are supplying 'Red' or 'Green' parts.

⑨ Borrower (custname, loannumber)

Loan (Loannumber, branchname, amount)

Customer (custname, custstreet, custcity)

Branch (branchname, branchcity, branchassets)

Depositor (custname, accountnumber)

(i) List in alphabetic order of all customers who have a loan at the Kolkata branch.

(ii) Find all customers who have loan at the bank and whose names are neither Prithbee nor Krishna.

(iii) Find the name of branch and city that has maximum assets. [Relational Algebra]

⑩ Supplier (s#, sname, saddress)

Parts (p#, pname, color)

Catalog (s#, p#, cost)

(i) Find the name of the suppliers who supply 'GREEN' parts.

(ii) Find the name of the suppliers who supply both 'BLUE' and 'GREEN' parts.

(iii) Find the name of the suppliers who supply all the parts. 2010

⑪ Customer (cid, cname, city, discount); Agents (aid, aname, city, percent); Products (pid, pname, city, quantity, price); Orders (ordno, month, cid, pid, aid, qty, rupees)

(i) List cities of agents booking an order from customer C002.

(ii) Find all tuples for customers, agent product combinations that are all in the same city. (iii) List cids of customers who order both product P01 and P07. 2008

⑫ ENROLL (sno, cno, section); TEACH (Prof, cno, section); ADVICE (Prof, sno, GRADES (sno, cno, grade, year); STUDENT (sno, sname)

(i) List all students taking courses with 'Smith' or 'Jones'.

(ii) List all students taking atleast one course that their advisor teaches. (iii) List those professors who teach more than one section of the same course.

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