1. From the following table, write a SQL query to find those employees who get a h**1.** From the following table, write a SQL query to find those employees who get a higher salary than the employee whose ID is 163. Return first name, last name.

Sample table: employees

Sample Output:

first_name	last_name
Steven	King
Neena	Kochhar
Lex	De Haan
.....	

>>select first_name,last_name,salary from employees where salary>(select salary from employees where employee_id=163);

2. From the following table, write a SQL query to find those employees whose designation is the same as the employee whose ID is 169. Return first name, last name, department ID and job ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id	job_id
Peter	Tucker	10000.00	80	SA_REP
David	Bernstein	9500.00	80	SA_REP
Peter	Hall	9000.00	80	SA_REP
.....				

>>select first_name,last_name,department_id,job_id from employees where job_id=(select job_id from employees where employee_id=169);

3. From the following table, write a SQL query to find those employees whose salary matches the smallest salary of any of the departments. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
Bruce	Ernst	6000.00	60
Diana	Lorentz	4200.00	60
.....			

```
>>select first_name,last_name,department_id,salary from employees where
salary in (select min(salary) from employees group by department_id);
```

4. From the following table, write a SQL query to find those employees who earn more than the average salary. Return employee ID, first name, last name.

Sample table: employees

Sample Output:

employee_id	first_name	last_name
100	Steven	King
101	Neena	Kochhar
102	Lex	De Haan
103	Alexander	Hunold
.....		

5. From the following table, write a SQL query to find those employees who report that manager whose first name is ‘Payam’. Return first name, last name, employee ID and salary.

Sample table: employees

Sample Output:

first_name	last_name	employee_id	salary
Jason	Mallin	133	3300.00
Michael	Rogers	134	2900.00
Ki	Gee	135	2400.00
Hazel	Philtanker	136	2200.00
.....			

6. From the following tables, write a SQL query to find all those employees who work in the Finance department. Return department ID, name (first), job ID and department name.

Sample table: employees

Sample table: departments

Sample Output:

department_id	first_name	job_id	department_name
100	Nancy	FI_MGR	Finance
100	Daniel	FI_ACCOUNT	Finance
100	John	FI_ACCOUNT	Finance
100	Ismael	FI_ACCOUNT	Finance
100	Jose Manuel	FI_ACCOUNT	Finance

100	Luis	FI_ACCOUNT	Finance

7. From the following table, write a SQL query to find the employee whose salary is 3000 and reporting person's ID is 121. Return all fields.

Sample table : employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
187	Anthony	Cabrio	ACABRIO	650.509.4876	2007-02-07	SH_CLERK	3000.00	0.00	121	50

8. From the following table, write a SQL query to find those employees whose ID matches any of the number 134, 159 and 183. Return all the fields.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
134	Michael	Rogers	MROGERS	650.127.1834	2006-08-26	ST_CLERK	2900.00	0.00	122	50
159	Lindsey	Smith	LSMITH	011.44.1345.729268	2005-03-10	SA_REP	8000.00	0.30	146	80
183	Girard	Geoni	GGEONI	650.507.9879	2008-02-03	SH_CLERK	2800.00	0.00	120	50

9. From the following table, write a SQL query to find those employees whose salary is in the range 1000, and 3000 (Begin and end values have included.). Return all the fields.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
116	Shelli	Baida	SBAIDA	515.127.4563	2005-12-24	PU_CLERK	2900.00	0.00	114	30
117	Sigal	Tobias	STOBIAS	515.127.4564	2005-07-24	PU_CLERK	2800.00	0.00	114	30
118	Guy	Himuro	GHIMURO	515.127.4565	2006-11-15	PU_CLERK	2600.00	0.00	114	30
119	Karen	Colmenares	KCOLMENA	515.127.4566	2007-08-10	PU_CLERK	2500.00	0.00	114	30

.....

10. From the following table and write a SQL query to find those employees whose salary is in the range of smallest salary, and 2500. Return all the fields.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
119	Karen	Colmenares	KCOLMENA	515.127.4566	2007-08-10	PU_CLERK	2500.00	0.00	114	30
127	James	Landry	JLANDRY	650.124.1334	2007-01-14	ST_CLERK	2400.00	0.00	120	50

128 Steven Markle SMARKLE 650.124.1434
2008-03-08 ST_CLERK 2200.00 0.00 120 50
.....

>>select * from employees where salary between (select min(salary) from employees) and 2500;

11. From the following tables, write a SQL query to find those employees who do not work in those departments where manager ids are in the range 100, 200 (Begin and end values are included.) Return all the fields of the employees.

Sample table: employees

Sample table: departments

Sample Output:

employee_id first_name last_name email phone_number hire_date
job_id salary commission_pct manager_id department_id
178 Kimberely Grant KGRANT 011.44.1644.429263 2007-
05-24 SA_REP 7000.00 0.15 149 0
201 Michael Hartstein MHARTSTE515.123.5555 2004-
02-17 MK_MAN 13000.00 0.00 100 20
202 Pat Fay PFAY 603.123.6666 2005-08-17
MK_REP 6000.00 0.00 201 20
203 Susan Mavris SMAVRIS 515.123.7777 2002-
06-07 HR_REP 6500.00 0.00 101 40
.....

>>select * from employees where department_id not in (select department_id from departments where manager_id not between 100 and 200);

12. From the following table, write a SQL query to find those employees who get second-highest salary. Return all the fields of the employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
101	Neena	Kochhar	NKOCHHAR	515.123.4568	2005-09-21	AD_VP	17000.00	0.00	100	90
102	Lex	De Haan	LDEHAAN	515.123.4569	2001-01-13	AD_VP	17000.00	0.00	100	90

>> select * from employees order by salary desc offset(1) limit (1);

13. From the following tables, write a SQL query to find those employees who work in the same department where 'Clara' works. Exclude all those records where first name is 'Clara'. Return first name, last name and hire date.

Sample table: employees

Sample Output:

first_name	last_name	hire_date
John	Russell	2004-10-01
Karen	Partners	2005-01-05
Alberto	Errazuriz	2005-03-10
Gerald	Cambrault	2007-10-15

.....

>>select first_name,last_name,hire_date from employees where department_id=(select department_id from employees where first_name='Clara') and first_name not in ('Clara');

14. From the following tables, write a SQL query to find those employees who work in a department where the employee's first name contains a letter 'T'. Return employee ID, first name and last name.

Sample table: employees

Sample Output:

employee_id	first_name	last_name
120	Matthew	Weiss
121	Adam	Fripp
122	Payam	Kaufling
123	Shanta	Vollman
124	Kevin	Mourgos
.....		

>> like '%T' in subquery

15. From the following tables, write a SQL query to find those employees who earn more than the average salary and work in a department with any employee whose first name contains a character a 'J'. Return employee ID, first name and salary.

Sample table: employees

Sample Output:

employee_id	first_name	salary
108	Nancy	12000.00
109	Daniel	9000.00
110	John	8200.00
111	Ismael	7700.00
.....		

>>select first_name,last_name,salary from employees where salary>(select avg(salary) from employees) and department_id in (select department_id from employees where first_name like '%J%');

16. From the following table, write a SQL query to find those employees whose department located at 'Toronto'. Return first name, last name, employee ID, job ID.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

first_name	last_name	employee_id	job_id
Michael	Hartstein	201	MK_MAN
Pat	Fay	202	MK_REP

>> select first_name,last_name,employee_id,job_id from employees where department_id in (select department_id from departments where location_id=(select location_id from locations where city='Toronto'));

17. From the following table, write a SQL query to find those employees whose salary is lower than any salary of those employees whose job title is ‘MK_MAN’. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG
106	Valli	Pataballa	IT_PROG
107	Diana	Lorentz	IT_PROG
.....			

18. From the following table, write a SQL query to find those employees whose salary is lower than any salary of those employees whose job title is 'MK_MAN'. Exclude employees of Job title ‘MK_MAN’. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG
106	Valli	Pataballa	IT_PROG
107	Diana	Lorentz	IT_PROG
.....			

19. From the following table, write a SQL query to find those employees whose salary is more than any salary of those employees whose job title is 'PU_MAN'. Exclude job title 'PU_MAN'. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
100	Steven	King	AD_PRES
101	Neena	Kochhar	AD_VP
102	Lex	De Haan	AD_VP
108	Nancy	Greenberg	FI_MGR
.....			

20. From the following table, write a SQL query to find those employees whose salary is more than average salary of any department. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
100	Steven	King	AD_PRES

21. From the following table, write a SQL query to find any existence of those employees whose salary exceeds 3700. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	department_id
Steven	King	90
Neena	Kochhar	90
Lex	De Haan	90
Alexander	Hunold	60
Bruce	Ernst	60
.....		

22. From the following table, write a SQL query to find total salary of those departments where at least one employee works. Return department ID, total salary.

Sample table: employees

Sample table: departments

Sample Output:

department_id	total_amt
10	4400.00
20	19000.00
30	24900.00
40	6500.00
.....	

23. Write a query to display the employee id, name (first name and last name) and the job id column with a modified title SALESMAN for those employees whose job title is ST_MAN and DEVELOPER for whose job title is IT_PROG.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	designation	salary
100	Steven	King	AD_PRES	24000.00
101	Neena	Kochhar	AD_VP	17000.00
102	Lex	De Haan	AD_VP	17000.00
103	Alexander	Hunold	DEVELOPER	9000.00
104	Bruce	Ernst	DEVELOPER	6000.00

24. Write a query to display the employee id, name (first name and last name), salary and the SalaryStatus column with a title HIGH and LOW respectively for those employees whose salary is more than and less than the average salary of all employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	salary	salarystatus
100	Steven	King	24000.00	HIGH
101	Neena	Kochhar	17000.00	HIGH
102	Lex	De Haan	17000.00	HIGH
103	Alexander	Hunold	9000.00	HIGH
104	Bruce	Ernst	6000.00	LOW
105	David	Austin	4800.00	LOW

25. Write a query to display the employee id, name (first name and last name), SalaryDrawn, AvgCompare (salary - the average salary of all employees) and the SalaryStatus column with a title HIGH and LOW respectively for those

employees whose salary is more than and less than the average salary of all employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	salarydrawn	avgcompare	salarystatus
100	Steven	King	24000.00	17538.32	HIGH
101	Neena	Kochhar	17000.00	10538.32	HIGH
102	Lex	De Haan	17000.00	10538.32	HIGH
103	Alexander	Hunold	9000.00	2538.32	HIGH
104	Bruce	Ernst	6000.00	-461.68	LOW
105	David	Austin	4800.00	-1661.68	LOW

26. From the following table, write a SQL query to find all those departments where at least one or more employees work.Return department name.

Sample table: employees

Sample table: departments

Sample Output:

department_name
Administration
Marketing
Purchasing
Human Resources
Shipping
.....

27. From the following tables, write a SQL query to find those employees who work in departments located at 'United Kingdom'. Return first name.

Sample table: employees

Sample table: departments

Sample table: locations

Sample table: countries

Sample Output:

first_name
Susan

28. From the following table, write a SQL query to find those employees who earn more than average salary and who work in any of the 'IT' departments. Return last name.

Sample table: employees

Sample table: departments

Sample Output:

last_name
Hunold

29. From the following table, write a SQL query to find all those employees who earn more than an employee whose last name is 'Ozer'. Sort the result in ascending order by last name. Return first name, last name and salary.

Sample table: employees

Sample Output:

first_name	last_name	salary
Lex	De Haan	17000.00
Alberto	Errazuriz	12000.00
Nancy	Greenberg	12000.00
Michael	Hartstein	13000.00
.....		

30. From the following tables, write a SQL query to find those employees who work under a manager based in ‘US’. Return first name, last name.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

first_name	last_name
Neena	Kochhar
Lex	De Haan
Alexander	Hunold
Bruce	Ernst
David	Austin
.....	

31. From the following tables, write a SQL query to find those employees whose salary is greater than 50% of their department's total salary bill. Return first name, last name.

Sample table : employees

Sample Output:

first_name	last_name
Kimberely	Grant
Jennifer	Whalen
Michael	Hartstein
Susan	Mavris
Hermann	Baer
Shelley	Higgins

32. From the following tables, write a SQL query to find those employees who are managers. Return all the fields of employees table.

Sample table: employees

Sample table: departments

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
100	Steven	King	SKING	515.123.4567	2003-06-17	AD_PRES	24000.00	0.00	0	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	2006-01-03	IT_PROG	9000.00	0.00	102	60
108	Nancy	Greenberg	NGREENBE	515.124.4569	2002-08-17	FI_MGR	12000.00	0.00	101	100

.....

33. From the following table, write a SQL query to find those employees who manage a department. Return all the fields of employees table.

Sample table: employees

Sample table: departments

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
100	Steven	King	SKING	515.123.4567	2003-06-17	AD_PRES	24000.00	0.00	0	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	2006-01-03	IT_PROG	9000.00	0.00	102	60
108	Nancy	Greenberg	NGREENBE	515.124.4569	2002-08-17	FI_MGR	12000.00	0.00	101	100

.....

34. From the following table, write a SQL query to find those employees who get such a salary, which is the maximum of salaried employee, joining within January

1st, 2002 and December 31st, 2003. Return employee ID, first name, last name, salary, department name and city.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

employee_id	first_name	last_name	salary	department_name	city
100	Steven	King	24000.00	Executive	Seattle

35. From the following tables, write a SQL query to find those departments, located in the city ‘London’. Return department ID, department name.

Sample table: departments

Sample table: locations

Sample Output:

department_id	department_name
40	Human Resources

36. From the following table, write a SQL query to find those employees who earn more than the average salary. Sort the result-set in descending order by salary. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
John	Russell	14000.00	80

37. From the following table, write a SQL query to find those employees who earn more than the maximum salary of a department of ID 40. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
Alexander	Hunold	9000.00	60

38. From the following table, write a SQL query to find departments for a particular location. The location matches the location of the department of ID 30. Return department name and department ID.

Sample table: departments

Sample Output:

department_name	department_id
Administration	10
Purchasing	30
Executive	90
Finance	100
Accounting	110

39. From the following table, write a SQL query to find those employees who work in that department where the employee works of ID 201. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Michael	Hartstein	13000.00	20
Pat	Fay	6000.00	20

40. From the following table, write a SQL query to find those employees whose salary matches to the salary of the employee who works in that department of ID 40. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Shanta	Vollman	6500.00	50
Susan	Mavris	6500.00	40

41. From the following table, write a SQL query to find those employees who work in the department 'Marketing'. Return first name, last name and department ID.

Sample table: employees

Sample table: departments

Sample Output:

first_name	last_name	department_id
Michael	Hartstein	20
Pat	Fay	20

42. From the following table, write a SQL query to find those employees who earn more than the minimum salary of a department of ID 40. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
Alexander	Hunold	9000.00	60

43. From the following table, write a SQL query to find those employees who joined after the employee whose ID is 165. Return first name, last name and hire date.

Sample table: employees

Sample Output:

full_name	hire_date
Steven Markle	2008-03-08
Sundar Ande	2008-03-24
Amit Banda	2008-04-21
Sundita Kumar	2008-04-21

44. From the following table, write a SQL query to find those employees who earn less than the minimum salary of a department of ID 70. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Alexander	Hunold	9000.00	60
Bruce	Ernst	6000.00	60
David	Austin	4800.00	60
Valli	Pataballa	4800.00	60

45. From the following table, write a SQL query to find those employees who earn less than the average salary, and work at the department where the employee 'Laura' (first name) works. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Kevin	Mourgos	5800.00	50
Julia	Nayer	3200.00	50
Irene	Mikkilineni	2700.00	50
James	Landry	2400.00	50

46. From the following tables, write a SQL query to find those employees whose department is located in the city 'London'. Return first name, last name, salary, and department ID.

Sample table: employees

Sample table: locations

Sample table: departments

Sample Output:

first_name	last_name	salary	department_id
Susan	Mavris	6500.00	40

47. From the following tables, write a SQL query to find the city of the employee of ID 134. Return city.

Sample table: locations

Sample table: departments

Sample table: employees

Sample Output:

city
South San Francisco

48. From the following tables, write a SQL query to find those departments where maximum salary is 7000 and above. The employees worked in those departments have already completed one or more jobs. Return all the fields of the departments.

Sample table: departments

Sample table: employees

Sample table: job_history

Sample Output:

department_id	department_name	manager_id	location_id
80	Sales	145	2500
90	Executive	100	1700

49. From the following tables, write a SQL query to find those departments where starting salary is at least 8000. Return all the fields of departments.

Sample table: departments

Sample table: employees

Sample Output:

department_id	department_name	manager_id	location_id
70	Public Relations	204	2700
90	Executive	100	1700
110	Accounting	205	1700

50. From the following table, write a SQL query to find those managers who supervise four or more employees. Return manager name, department ID.

Sample table : employees

Sample Output:

manager_name	department_id
Steven King	90
Neena Kochhar	90
Alexander Hunold	60
Nancy Greenberg	100

51. From the following table, write a SQL query to find those employees who worked as a 'Sales Representative' in the past. Return all the fields of jobs.

Sample table: jobs

Sample table: employees

Sample table: job_history

Sample Output:

job_id	job_title	min_salary	max_salary
SA_REP	Sales Representative	6000	12000

52. From the following table, write a SQL query to find those employees who earn second-lowest salary of all the employees. Return all the fields of employees.

Sample table : employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
128	Steven	Markle	SMARKLE	650.124.1434	2008-03-08	ST_CLERK	2200.00	0.00	120	50
136	Hazel	Philtanker	HPHILTAN	650.127.1634	2008-02-06	ST_CLERK	2200.00	0.00	122	50

53. From the following table, write a SQL query to find those departments managed by ‘Susan’. Return all the fields of departments.

Sample table: departments

Sample table: employees

Sample Output:

department_id	department_name	manager_id	location_id
40	Human Resources	203	2400

54. From the following table, write a SQL query to find those employees who earn highest salary in a department. Return department ID, employee name, and salary.

Sample table: employees

Sample Output:

department_id	employee_name	salary
90	Steven King	24000.00
60	Alexander Hunold	9000.00
100	Nancy Greenberg	12000.00
30	Den Raphaely	11000.00
....		

55. From the following table, write a SQL query to find those employees who did not have any job in the past. Return all the fields of employees.

Sample table: employees

Sample table: job_history

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
100	Steven	King	SKING	515.123.4567	2003-06-17	AD_PRES	24000.00	0.00	0	90

103 Alexander Hunold AHUNOLD 590.423.4567 2006-01-03 IT_PROG 9000.00 0.00 102 60
104 Bruce Ernst BERNST 590.423.4568 2007-05-21 IT_PROG 6000.00 0.00 103 60
105 David Austin DAUSTIN 590.423.4569 2005-06-25 IT_PROG 4800.00 0.00 103 60
.....

igher salary than the employee whose ID is 163. Return first name, last name.

Sample table: employees

Sample Output:

first_name last_name
Steven King
Neena Kochhar
Lex De Haan
.....

2. From the following table, write a SQL query to find those employees whose designation is the same as the employee whose ID is 169. Return first name, last name, department ID and job ID.

Sample table: employees

Sample Output:

first_name last_name salary department_id job_id
Peter Tucker 10000.00 80 SA_REP

David	Bernstein	9500.00	80	SA_REP
Peter	Hall	9000.00	80	SA_REP
.....				

3. From the following table, write a SQL query to find those employees whose salary matches the smallest salary of any of the departments. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
Bruce	Ernst	6000.00	60
Diana	Lorentz	4200.00	60
.....			

4. From the following table, write a SQL query to find those employees who earn more than the average salary. Return employee ID, first name, last name.

Sample table: employees

Sample Output:

employee_id	first_name	last_name
100	Steven	King
101	Neena	Kochhar
102	Lex	De Haan
103	Alexander	Hunold

.....

5. From the following table, write a SQL query to find those employees who report that manager whose first name is ‘Payam’. Return first name, last name, employee ID and salary.

Sample table: employees

Sample Output:

first_name	last_name	employee_id	salary
Jason	Mallin	133	3300.00
Michael	Rogers	134	2900.00
Ki	Gee	135	2400.00
Hazel	Philtanker	136	2200.00

.....

6. From the following tables, write a SQL query to find all those employees who work in the Finance department. Return department ID, name (first), job ID and department name.

Sample table: employees

Sample table: departments

Sample Output:

department_id	first_name	job_id	department_name
100	Nancy	FI_MGR	Finance

100	Daniel	FI_ACCOUNT	Finance
100	John	FI_ACCOUNT	Finance
100	Ismael	FI_ACCOUNT	Finance
100	Jose Manuel	FI_ACCOUNT	Finance
100	Luis	FI_ACCOUNT	Finance

7. From the following table, write a SQL query to find the employee whose salary is 3000 and reporting person's ID is 121. Return all fields.

Sample table : employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
187	Anthony	Cabrio	ACABRIO	650.509.4876	2007-02-07	SH_CLERK	3000.00	0.00	121	50

8. From the following table, write a SQL query to find those employees whose ID matches any of the number 134, 159 and 183. Return all the fields.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
134	Michael	Rogers	MROGERS	650.127.1834	2006-08-26	ST_CLERK	2900.00	0.00	122	50
159	Lindsey	Smith	LSMITH	011.44.1345.729268	2005-03-10	SA_REP	8000.00	0.30	146	80

183 Girard Geoni GGEONI 650.507.9879 2008-02-03 SH_CLERK 2800.00 0.00 120 50

9. From the following table, write a SQL query to find those employees whose salary is in the range 1000, and 3000 (Begin and end values have included.). Return all the fields.

Sample table: employees

Sample Output:

employee_id first_name last_name email phone_number hire_date job_id salary commission_pct manager_id department_id
116 Shelli Baida SBAIDA 515.127.4563 2005-12-24 PU_CLERK 2900.00 0.00 114 30
117 Sigal Tobias STOBIAS 515.127.4564 2005-07-24 PU_CLERK 2800.00 0.00 114 30
118 Guy Himuro GHIMURO 515.127.4565 2006-11-15 PU_CLERK 2600.00 0.00 114 30
119 Karen Colmenares KCOLMENA 515.127.4566 2007-08-10 PU_CLERK 2500.00 0.00 114 30
.....

10. From the following table and write a SQL query to find those employees whose salary is in the range of smallest salary, and 2500. Return all the fields.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
119	Karen	Colmenares	KCOLMENA	515.127.4566	2007-08-10	PU_CLERK	2500.00	0.00	114	30
127	James	Landry	JLANDRY	650.124.1334	2007-01-14	ST_CLERK	2400.00	0.00	120	50
128	Steven	Markle	SMARKLE	650.124.1434	2008-03-08	ST_CLERK	2200.00	0.00	120	50

.....

11. From the following tables, write a SQL query to find those employees who do not work in those departments where manager ids are in the range 100, 200 (Begin and end values are included.) Return all the fields of the employees.

Sample table: employees

Sample table: departments

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
178	Kimberely	Grant	KGRANT	011.44.1644.429263	2007-05-24	SA_REP	7000.00	0.15	149	0
201	Michael	Hartstein	MHARTSTE	515.123.5555	2004-02-17	MK_MAN	13000.00	0.00	100	20
202	Pat	Fay	PFAY	603.123.6666	2005-08-17	MK_REP	6000.00	0.00	201	20
203	Susan	Mavris	SMAVRIS	515.123.7777	2002-06-07	HR_REP	6500.00	0.00	101	40

.....

12. From the following table, write a SQL query to find those employees who get second-highest salary. Return all the fields of the employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
101	Neena	Kochhar	NKOCHHAR	515.123.4568	2005-09-21	AD_VP	17000.00	0.00	100	90
102	Lex	De Haan	LDEHAAN	515.123.4569	2001-01-13	AD_VP	17000.00	0.00	100	90

13. From the following tables, write a SQL query to find those employees who work in the same department where ‘Clara’ works. Exclude all those records where first name is ‘Clara’. Return first name, last name and hire date.

Sample table: employees

Sample Output:

first_name	last_name	hire_date
John	Russell	2004-10-01
Karen	Partners	2005-01-05
Alberto	Errazuriz	2005-03-10
Gerald	Cambrault	2007-10-15
.....		

14. From the following tables, write a SQL query to find those employees who work in a department where the employee's first name contains a letter 'T'. Return employee ID, first name and last name.

Sample table: employees

Sample Output:

employee_id	first_name	last_name
120	Matthew	Weiss
121	Adam	Fripp
122	Payam	Kaufling
123	Shanta	Vollman
124	Kevin	Mourgos
.....		

15. From the following tables, write a SQL query to find those employees who earn more than the average salary and work in a department with any employee whose first name contains a character a 'J'. Return employee ID, first name and salary.

Sample table: employees

Sample Output:

employee_id	first_name	salary
108	Nancy	12000.00
109	Daniel	9000.00
110	John	8200.00
111	Ismael	7700.00
.....		

16. From the following table, write a SQL query to find those employees whose department located at 'Toronto'. Return first name, last name, employee ID, job ID.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

first_name	last_name	employee_id	job_id
Michael	Hartstein	201	MK_MAN
Pat	Fay	202	MK_REP

17. From the following table, write a SQL query to find those employees whose salary is lower than any salary of those employees whose job title is ‘MK_MAN’. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG

106	Valli	Pataballa	IT_PROG
107	Diana	Lorentz	IT_PROG
.....			

18. From the following table, write a SQL query to find those employees whose salary is lower than any salary of those employees whose job title is 'MK_MAN'. Exclude employees of Job title ‘MK_MAN’. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG
106	Valli	Pataballa	IT_PROG
107	Diana	Lorentz	IT_PROG
.....			

19. From the following table, write a SQL query to find those employees whose salary is more than any salary of those employees whose job title is 'PU_MAN'. Exclude job title 'PU_MAN'. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id

100	Steven	King	AD_PRES
101	Neena	Kochhar	AD_VP
102	Lex	De Haan	AD_VP
108	Nancy	Greenberg	FI_MGR
.....			

20. From the following table, write a SQL query to find those employees whose salary is more than average salary of any department. Return employee ID, first name, last name, job ID.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	job_id
100	Steven	King	AD_PRES

21. From the following table, write a SQL query to find any existence of those employees whose salary exceeds 3700. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	department_id
Steven	King	90
Neena	Kochhar	90
Lex	De Haan	90
Alexander	Hunold	60

```
Bruce           Ernst           60
.....
```

22. From the following table, write a SQL query to find total salary of those departments where at least one employee works. Return department ID, total salary.

Sample table: employees

Sample table: departments

Sample Output:

```
department_id       total_amt
10              4400.00
20              19000.00
30              24900.00
40              6500.00
.....
```

23. Write a query to display the employee id, name (first name and last name) and the job id column with a modified title SALESMAN for those employees whose job title is ST_MAN and DEVELOPER for whose job title is IT_PROG.

Sample table: employees

Sample Output:

```
employee_id first_name    last_name    designation   salary
```

100	Steven	King	AD_PRES	24000.00
101	Neena	Kochhar	AD_VP	17000.00
102	Lex	De Haan	AD_VP	17000.00
103	Alexander	Hunold	DEVELOPER	9000.00
104	Bruce	Ernst	DEVELOPER	6000.00

24. Write a query to display the employee id, name (first name and last name), salary and the SalaryStatus column with a title HIGH and LOW respectively for those employees whose salary is more than and less than the average salary of all employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	salary	salarystatus	
100	Steven	King	24000.00	HIGH	
101	Neena	Kochhar	17000.00	HIGH	
102	Lex	De Haan	17000.00	HIGH	
103	Alexander	Hunold	9000.00		HIGH
104	Bruce	Ernst	6000.00	LOW	
105	David	Austin	4800.00	LOW	

25. Write a query to display the employee id, name (first name and last name), SalaryDrawn, AvgCompare (salary - the average salary of all employees) and the SalaryStatus column with a title HIGH and LOW respectively for those employees whose salary is more than and less than the average salary of all employees.

Sample table: employees

Sample Output:

employee_id	first_name	last_name	salarydrawn	avgcompare	salarystatus
100	Steven	King	24000.00	17538.32	HIGH
101	Neena	Kochhar	17000.00	10538.32	HIGH
102	Lex	De Haan	17000.00	10538.32	HIGH
103	Alexander	Hunold	9000.00	2538.32	HIGH
104	Bruce	Ernst	6000.00	-461.68	LOW
105	David	Austin	4800.00	-1661.68	LOW

26. From the following table, write a SQL query to find all those departments where at least one or more employees work.Return department name.

Sample table: employees

Sample table: departments

Sample Output:

department_name
Administration
Marketing
Purchasing
Human Resources
Shipping
.....

27. From the following tables, write a SQL query to find those employees who work in departments located at 'United Kingdom'. Return first name.

Sample table: employees

Sample table: departments

Sample table: locations

Sample table: countries

Sample Output:

first_name
Susan

28. From the following table, write a SQL query to find those employees who earn more than average salary and who work in any of the 'IT' departments. Return last name.

Sample table: employees

Sample table: departments

Sample Output:

last_name
Hunold

29. From the following table, write a SQL query to find all those employees who earn more than an employee whose last name is 'Ozer'. Sort the result in ascending order by last name. Return first name, last name and salary.

Sample table: employees

Sample Output:

first_name	last_name	salary
Lex	De Haan	17000.00
Alberto	Errazuriz	12000.00
Nancy	Greenberg	12000.00
Michael	Hartstein	13000.00
.....		

30. From the following tables, write a SQL query to find those employees who work under a manager based in ‘US’. Return first name, last name.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

first_name	last_name
Neena	Kochhar
Lex	De Haan
Alexander	Hunold

Bruce Ernst
David Austin
.....

31. From the following tables, write a SQL query to find those employees whose salary is greater than 50% of their department's total salary bill. Return first name, last name.

Sample table : employees

Sample Output:

first_name last_name
Kimberely Grant
Jennifer Whalen
Michael Hartstein
Susan Mavris
Hermann Baer
Shelley Higgins

32. From the following tables, write a SQL query to find those employees who are managers. Return all the fields of employees table.

Sample table: employees

Sample table: departments

employee_id first_name last_name email phone_number hire_date job_id salary commission_pct manager_id department_id

100 Steven King SKING 515.123.4567 2003-06-17 AD_PRES 24000.00 0.00 0 90
103 Alexander Hunold AHUNOLD 590.423.4567 2006-01-03 IT_PROG 9000.00 0.00 102 60
108 Nancy Greenberg NGREENBE 515.124.4569 2002-08-17 FI_MGR 12000.00 0.00 101 100
.....

33. From the following table, write a SQL query to find those employees who manage a department. Return all the fields of employees table.

Sample table: employees

Sample table: departments

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
100	Steven	King	SKING	515.123.4567	2003-06-17	AD_PRES	24000.00	0.00	0	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	2006-01-03	IT_PROG	9000.00	0.00	102	60
108	Nancy	Greenberg	NGREENBE	515.124.4569	2002-08-17	FI_MGR	12000.00	0.00	101	100
.....										

34. From the following table, write a SQL query to find those employees who get such a salary, which is the maximum of salaried employee, joining within January 1st, 2002 and December 31st, 2003. Return employee ID, first name, last name, salary, department name and city.

Sample table: employees

Sample table: departments

Sample table: locations

Sample Output:

employee_id	first_name	last_name	salary	department_name	city
100	Steven	King	24000.00	Executive	Seattle

35. From the following tables, write a SQL query to find those departments, located in the city ‘London’. Return department ID, department name.

Sample table: departments

Sample table: locations

Sample Output:

department_id	department_name
40	Human Resources

36. From the following table, write a SQL query to find those employees who earn more than the average salary. Sort the result-set in descending order by salary. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
John	Russell	14000.00	80

37. From the following table, write a SQL query to find those employees who earn more than the maximum salary of a department of ID 40. Return first name, last name and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90
Lex	De Haan	17000.00	90
Alexander	Hunold	9000.00	60

38. From the following table, write a SQL query to find departments for a particular location. The location matches the location of the department of ID 30. Return department name and department ID.

Sample table: departments

Sample Output:

department_name	department_id
Administration	10
Purchasing	30
Executive	90
Finance	100
Accounting	110

39. From the following table, write a SQL query to find those employees who work in that department where the employee works of ID 201. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Michael	Hartstein	13000.00	20
Pat	Fay	6000.00	20

40. From the following table, write a SQL query to find those employees whose salary matches to the salary of the employee who works in that department of ID 40. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Shanta	Vollman	6500.00	50
Susan	Mavris	6500.00	40

41. From the following table, write a SQL query to find those employees who work in the department 'Marketing'. Return first name, last name and department ID.

Sample table: employees

Sample table: departments

Sample Output:

first_name	last_name	department_id
Michael	Hartstein	20
Pat	Fay	20

42. From the following table, write a SQL query to find those employees who earn more than the minimum salary of a department of ID 40. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Steven	King	24000.00	90
Neena	Kochhar	17000.00	90

Lex	De Haan	17000.00	90
Alexander	Hunold	9000.00	60

43. From the following table, write a SQL query to find those employees who joined after the employee whose ID is 165. Return first name, last name and hire date.

Sample table: employees

Sample Output:

full_name	hire_date
Steven Markle	2008-03-08
Sundar Ande	2008-03-24
Amit Banda	2008-04-21
Sundita Kumar	2008-04-21

44. From the following table, write a SQL query to find those employees who earn less than the minimum salary of a department of ID 70. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Alexander	Hunold	9000.00	60
Bruce	Ernst	6000.00	60
David	Austin	4800.00	60
Valli	Pataballa	4800.00	60

45. From the following table, write a SQL query to find those employees who earn less than the average salary, and work at the department where the employee 'Laura' (first name) works. Return first name, last name, salary, and department ID.

Sample table: employees

Sample Output:

first_name	last_name	salary	department_id
Kevin	Mourgos	5800.00	50
Julia	Nayer	3200.00	50
Irene	Mikkilineni	2700.00	50
James	Landry	2400.00	50

46. From the following tables, write a SQL query to find those employees whose department is located in the city 'London'. Return first name, last name, salary, and department ID.

Sample table: employees

Sample table: locations

Sample table: departments

Sample Output:

first_name	last_name	salary	department_id
Susan	Mavris	6500.00	40

47. From the following tables, write a SQL query to find the city of the employee of ID 134. Return city.

Sample table: locations

Sample table: departments

Sample table: employees

Sample Output:

city
South San Francisco

48. From the following tables, write a SQL query to find those departments where maximum salary is 7000 and above. The employees worked in those departments have already completed one or more jobs. Return all the fields of the departments.

Sample table: departments

Sample table: employees

Sample table: job_history

Sample Output:

department_id	department_name	manager_id	location_id
80	Sales	145	2500
90	Executive	100	1700

49. From the following tables, write a SQL query to find those departments where starting salary is at least 8000. Return all the fields of departments.

Sample table: departments

Sample table: employees

Sample Output:

department_id	department_name	manager_id	location_id
70	Public Relations	204	2700
90	Executive	100	1700
110	Accounting	205	1700

50. From the following table, write a SQL query to find those managers who supervise four or more employees. Return manager name, department ID.

Sample table : employees

Sample Output:

manager_name	department_id
Steven King	90

Neena Kochhar 90
Alexander Hunold 60
Nancy Greenberg 100

51. From the following table, write a SQL query to find those employees who worked as a 'Sales Representative' in the past. Return all the fields of jobs.

Sample table: jobs

Sample table: employees

Sample table: job_history

Sample Output:

job_id job_title min_salary max_salary
SA_REP Sales Representative 6000 12000

52. From the following table, write a SQL query to find those employees who earn second-lowest salary of all the employees. Return all the fields of employees.

Sample table : employees

Sample Output:

employee_id first_name last_name email phone_number hire_date job_id salary commission_pct manager_id department_id

128	Steven	Markle	SMARKLE	650.124.1434	2008-03-08	ST_CLERK	2200.00	0.00	120	50
136	Hazel	Philtanker	HPHILTAN	650.127.1634	2008-02-06	ST_CLERK	2200.00	0.00	122	50

53. From the following table, write a SQL query to find those departments managed by 'Susan'. Return all the fields of departments.

Sample table: departments

Sample table: employees

Sample Output:

department_id	department_name	manager_id	location_id
40	Human Resources	203	2400

54. From the following table, write a SQL query to find those employees who earn highest salary in a department. Return department ID, employee name, and salary.

Sample table: employees

Sample Output:

department_id	employee_name	salary
90	Steven King	24000.00
60	Alexander Hunold	9000.00
100	Nancy Greenberg	12000.00

30 Den Raphaely 11000.00
....

55. From the following table, write a SQL query to find those employees who did not have any job in the past. Return all the fields of employees.

Sample table: employees

Sample table: job_history

Sample Output:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
100	Steven	King	SKING	515.123.4567	2003-06-17	AD_PRES	24000.00	0.00	0	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	2006-01-03	IT_PROG	9000.00	0.00	102	60
104	Bruce	Ernst	BERNST	590.423.4568	2007-05-21	IT_PROG	6000.00	0.00	103	60
105	David	Austin	DAUSTIN	590.423.4569	2005-06-25	IT_PROG	4800.00	0.00	103	60

.....