MySQL Basic SELECT statement

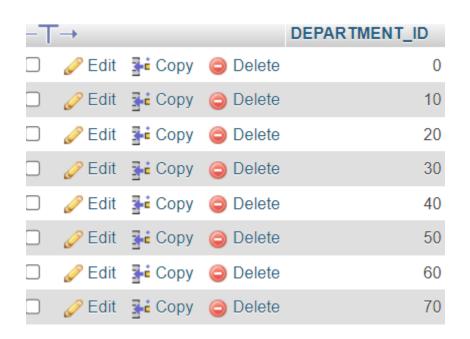
1. Write a query to display the names (first_name, last_name) using alias name "First Name", "Last Name".

<u>SELECT</u> FIRST_NAME AS "First Name", LAST_NAME AS "Last Name" FROM employees;



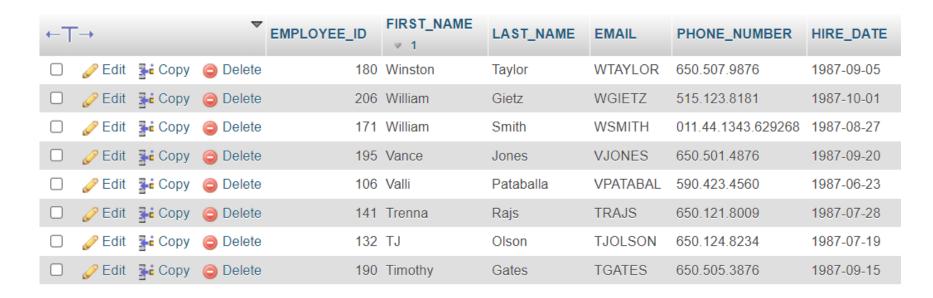
2. Write a query to get unique department ID from employee table.

SELECT DISTINCT DEPARTMENT_ID FROM employees;



2. Write a query to get all employee details from the employee table order by first name, descending.

<u>SELECT</u> * FROM employees ORDER BY FIRST_NAME DESC;



4.Write a query to get the names (first_name, last_name), salary, PF of all the employees (PF is calculated as 15% of salary)

<u>SELECT</u> FIRST_NAME, LAST_NAME, SALARY, (SALARY * 0.15) AS PF FROM employees;

←Τ	_→		∇	FIRST_NAME	LAST_NAME	SALARY	PF
		≩ Copy	Delete	Steven	King	24000.00	3600.0000
	<i>⊘</i> Edit	≩ сору	Delete	Neena	Kochhar	17000.00	2550.0000
		≩ Сору	Delete	Lex	De Haan	17000.00	2550.0000
	<i></i> € Edit	≩ Copy	Delete	Alexander	Hunold	9000.00	1350.0000
		≩ Сору	Delete	Bruce	Ernst	6000.00	900.0000
	<i></i> € Edit	≩ сору	Delete	David	Austin	4800.00	720.0000
		≩ Сору	Delete	Valli	Pataballa	4800.00	720.0000
	<i>⊘</i> Edit	≩ Copy	Delete	Diana	Lorentz	4200.00	630.0000

5. Write a query to get the employee ID, names (first_name, last_name), salary in ascending order of salary.

SELECT EMPLOYEE_ID, FIRST_NAME, LAST_NAME, SALARY FROM employees ORDE R BY SALARY;

	≩ Copy	Delete	132	TJ	Olson	2100.00
<i></i> € Edit	≩ Copy	Delete	136	Hazel	Philtanker	2200.00
Ø Edit	≩ Copy	Delete	128	Steven	Markle	2200.00
	≩ Copy	Delete	127	James	Landry	2400.00
Ø Edit	≩ Copy	Delete	135	Ki	Gee	2400.00
Ø Edit	≩ € Copy	Delete	140	Joshua	Patel	2500.00
Ø Edit	≩- Сору	Delete	191	Randall	Perkins	2500.00
	≩ Copy	Delete	144	Peter	Vargas	2500.00

6. Write a query to get the total salaries payable to employees.

SUM(SALARY) 691400.00

7. Write a query to get the maximum and minimum salary from employees table SELECT_MAX(SALARY), MIN(SALARY) FROM employees;

MAX(SALARY)	MIN(SALARY)
24000.00	2100.00

8. Write a query to get the average salary and number of employees in the employees table.

<u>SELECT AVG</u>(salary), <u>COUNT</u>(*) FROM employees;

```
AVG(salary) COUNT(*)
6461.682243 107
```

9. Write a query to get the number of employees working with the company

SELECT COUNT(*) FROM employees;

```
COUNT(*)
107
```

10. Write a query to get the number of jobs available in the employees table. **SELECT COUNT**(DISTINCT JOB_ID) FROM employees;

```
COUNT(DISTINCT JOB_ID)
19
```

11. Write a query get all first name from employees table in upper case

SELECT UPPER(first_name) FROM employees;

UPPER(first_name)
ELLEN
SUNDAR
MOZHE
DAVID
HERMANN
SHELLI
AMIT
ELIZABETH

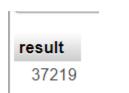
12. Write a query to get the first 3 characters of first name from employees table

<u>SELECT LEFT</u>(FIRST_NAME, 3) AS first_three_letters FROM employees;



13. Write a query to calculate 171*214+625.

<u>SELECT</u> 171 * 214 + 625 AS result;



14. Write a query to get the names (for example Ellen Abel, Sundar Ande etc.) of all the employees from employees table.

SELECT CONCAT(first_name, ' ', last_name) AS full_name FROM employees;



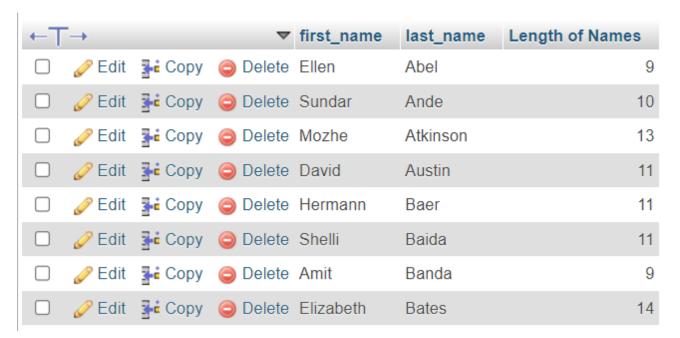
15. Write a query to get first name from employees table after removing white spaces from both side.

SELECT TRIM(first_name) FROM employees;



16. Write a query to get the length of the employee names (first_name, last_name) from employees table.

SELECT first_name,last_name, LENGTH(first_name)+LENGTH(last_name) AS 'Lengt
h of Names' FROM employees;



17. Write a query to check if the first_name fields of the employees table contains numbers.

<u>SELECT</u> * FROM employees WHERE FIRST_NAME <u>REGEXP</u> '[0-9]';

EMPLOYEE_ID FIRST_NAME LAST_NAME EMAIL PHONE_NUMBER HIRE_DATE JOB_ID SALARY COMMISSION_PCT MANAGER_ID DEPARTMENT_ID

18. Write a query to select first 10 records from a table

SELECT EMPLOYEE_ID, FIRST_NAME FROM employees LIMIT 10;



MySQL restricting and sorting data

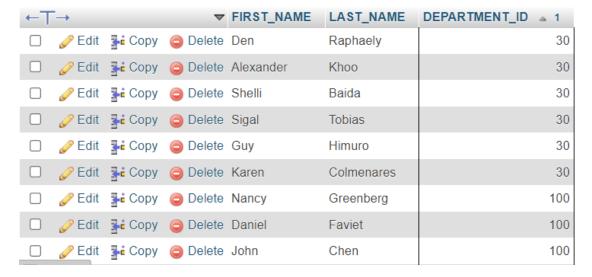
1. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000.

SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE SALARY < 10 000 OR SALARY > 15000;



2. Write a query to display the name (first_name, last_name) and department ID of all employees in departments 30 or 100 in ascending order.

SELECT FIRST_NAME, LAST_NAME, DEPARTMENT_ID FROM employees WHERE DE PARTMENT_ID IN(30, 100) ORDER BY DEPARTMENT_ID ASC;



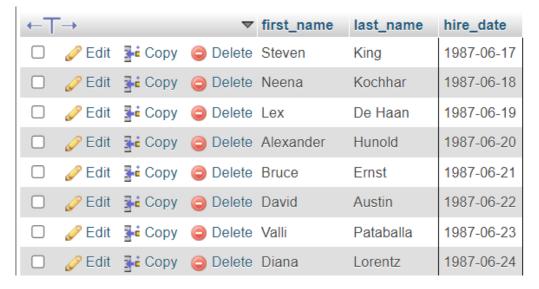
3. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000 and are in department 30 or 100.

SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE (SALARY < 1 0000 OR SALARY > 15000) AND DEPARTMENT_ID IN (30, 100);



4. Write a query to display the name (first_name, last_name) and hire date for all employees who were hired in 1987.

 $\frac{\text{SELECT}}{\text{First_name, last_name, hire_date FROM employees WHERE EXTRACT}(\text{YEAR FROM hire_date}) = 1987$



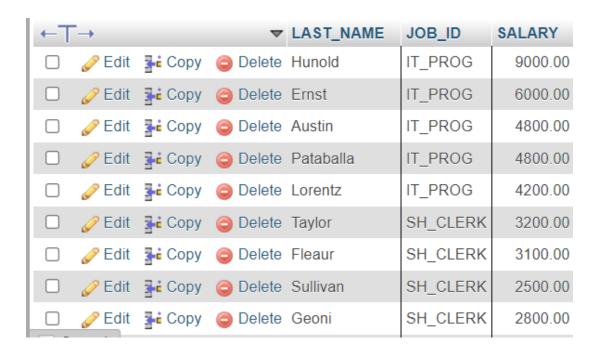
5. Write a query to display the first_name of all employees who have both "b" and "c" in their first name.

<u>SELECT</u> FIRST_NAME FROM employees WHERE FIRST_NAME <u>LIKE</u> '%b%' <u>AND</u> FIRS T_NAME <u>LIKE</u> '%c%';



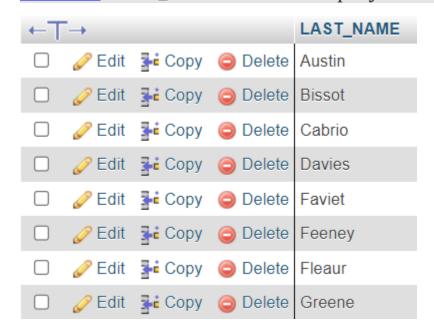
6. Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to \$4,500, \$10,000, or \$15,000.

SELECT LAST_NAME, JOB_ID, SALARY FROM employees WHERE JOB_ID IN ('IT_PROG', 'SH_CLERK') AND SALARY NOT IN (4500,10000, 15000);



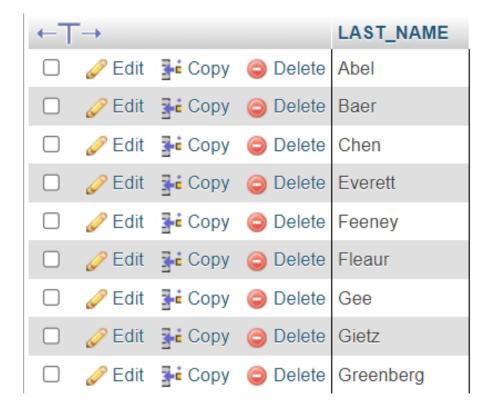
7. Write a query to display the last name of employees whose names have exactly 6 characters

<u>SELECT</u> LAST_NAME FROM employees WHERE LENGTH(LAST_NAME) = 6;



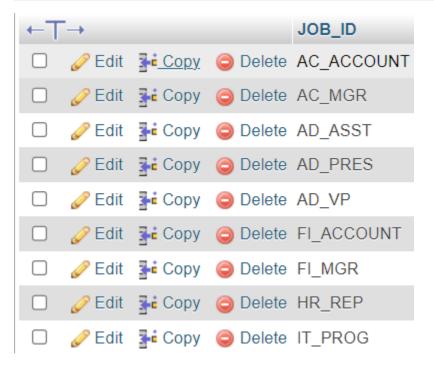
8. Write a query to display the last name of employees having 'e' as the third character.

SELECT LAST_NAME FROM employees WHERE LAST_NAME LIKE '__e%';



9. Write a query to display the jobs/designations available in the employees table.

SELECT DISTINCT JOB_ID FROM employees;



10. Write a query to display the name (first_name, last_name), salary and PF (15% of salary) of all employees.

SELECT FIRST_NAME, LAST_NAME, SALARY, SALARY * 0.15 AS PF FROM employees

←Ţ	\rightarrow			FIRST_NAME	LAST_NAME	SALARY	PF
	Click the d to toggle d	lrop-down column's vi	arrow isibility.	Steven	King	24000.00	3600.0000
	<i></i> €dit	≩ Copy	Delete	Neena	Kochhar	17000.00	2550.0000
	<i> Edit</i>	≩ Сору	Delete	Lex	De Haan	17000.00	2550.0000
	<i> </i>	≩ Copy	Delete	Alexander	Hunold	9000.00	1350.0000
	<i></i> €dit	≩ Copy	Delete	Bruce	Ernst	6000.00	900.0000
	<i></i> €dit	≩ сору	Delete	David	Austin	4800.00	720.0000
	Ø Edit	≩ Copy	Delete	Valli	Pataballa	4800.00	720.0000

11. Write a query to select all record from employees where last name in 'BLAKE', 'SCOTT', 'KING' and 'FORD'.

<u>SELECT</u> * FROM employees WHERE LAST_NAME <u>IN</u>('JONES', 'BLAKE', 'SCOTT', 'KIN G', 'FORD');



MySQL Aggregate Functions and Group by-Exercises

1. Write a query to list the number of jobs available in the employees table.

SELECT COUNT(DISTINCT job_id) FROM employees;

```
COUNT(DISTINCT job_id)
19
```

2. Write a query to get the total salaries payable to employees

SELECT SUM(salary) FROM employees;

```
SUM(salary)
691400.00
```

3. Write a query to get the minimum salary from employees table.

SELECT MIN(salary) FROM employees

```
MIN(salary)
2100.00
```

4. Write a query to get the maximum salary of an employee working as a Programmer.

SELECT MAX(salary) FROM employees WHERE job_id = 'IT_PROG';

```
MAX(salary)
9000.00
```

5. Write a query to get the average salary and number of employees working the department 90.

<u>SELECT AVG</u>(salary), <u>count</u>(*) FROM employees WHERE department_id = 90;



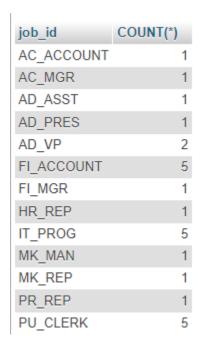
6. Write a query to get the highest, lowest, sum, and average salary of all employees.

<u>SELECT</u> ROUND(<u>MAX</u>(salary),0) 'Maximum', ROUND(<u>MIN</u>(salary),0) 'Minimum', ROUND(<u>SUM</u>(salary),0) 'Sum', ROUND(<u>AVG</u>(salary),0) 'Average' FR OM employees

Maximum	Minimum	Sum	Average
24000	2100	691400	6462

7. Write a query to get the number of employees with the same job.

SELECT job_id, COUNT(*) FROM employees GROUP BY job_id;



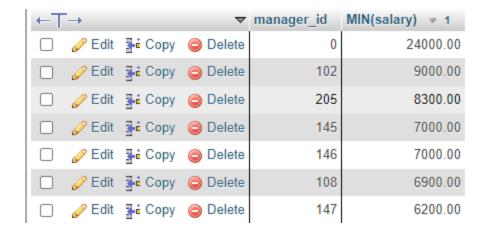
8. Write a query to get the difference between the highest and lowest salaries

SELECT MAX(salary) - MIN(salary) DIFFERENCE FROM employees;

```
DIFFERENCE
21900.00
```

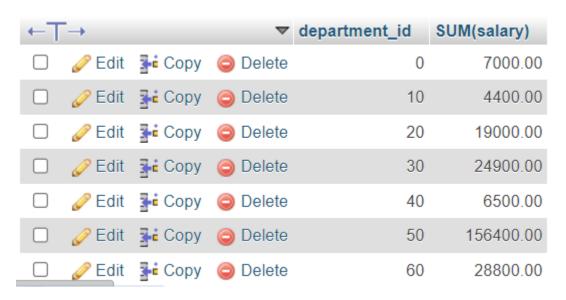
9. Write a query to find the manager ID and the salary of the lowest-paid employee for that manager.

<u>SELECT</u> manager_id, <u>MIN</u>(salary) FROM employees WHERE manager_id <u>IS NOT</u> NUL L GROUP BY manager_id ORDER BY <u>MIN</u>(salary) DESC;



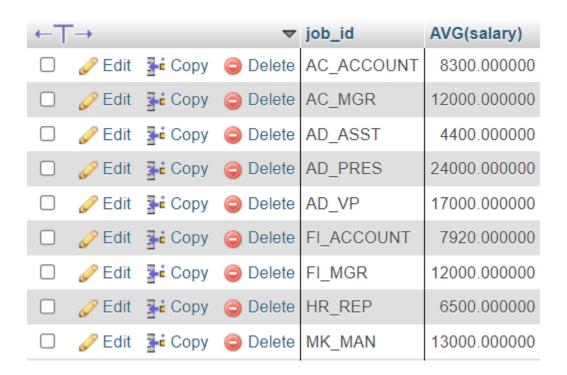
10. Write a query to get the department ID and the total salary payable in each department.

<u>SELECT</u> department_id, <u>SUM</u>(salary) FROM employees GROUP BY de partment_id;



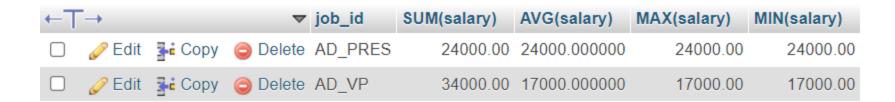
11. Write a query to get the average salary for each job ID excluding programmer.

SELECT job_id, AVG(salary) FROM employees WHERE job_id
> 'IT_PROG' GROUP BY job_id;



12. Write a query to get the total salary, maximum, minimum, average salary of employees (job ID wise), for department ID 90 only.

SELECT job_id, SUM(salary), AVG(salary), MAX(salary), MIN(salary) FROM employe es WHERE department_id = '90' GROUP BY job_id;



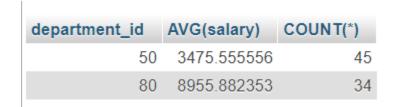
13. Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to \$4000.

<u>SELECT</u> job_id, <u>MAX</u>(salary) FROM employees GROUP BY job_id HAVING <u>M</u>
<u>AX</u>(salary) >=4000;



14. Write a query to get the average salary for all departments employing more than 10 employees.

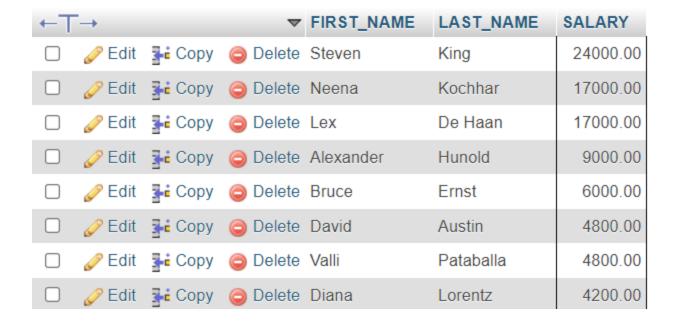
<u>SELECT</u> department_id, <u>AVG</u>(salary), <u>COUNT</u>(*) FROM employees GROUP BY depart ment_id HAVING <u>COUNT</u>(*) > 10;



MySQL Subquery

 Write a query to find the name (first_name, last_name) and the salary of the employees who have a higher salary than the employee whose last_name='Bull'.

SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WH
ERE SALARY > (SELECT salary FROM employees WHERE last_nam
e = 'Bull');



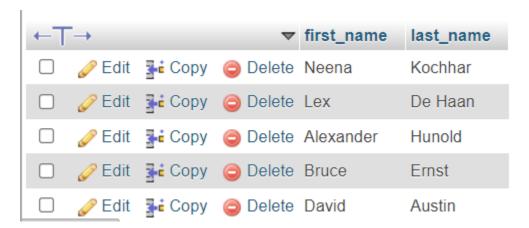
2. Write a query to find the name (first_name, last_name) of all employees who works in the IT department.

SELECT first_name, last_name FROM employees WHERE depar
tment_id IN (SELECT department_id FROM departments WHER
E department_name='IT');



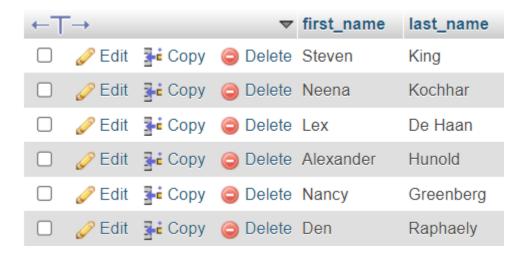
3. Write a query to find the name (first_name, last_name) of the employees who have a manager and worked in a USA based department.

<u>SELECT</u> first_name, last_name FROM employees WHERE mana ger_id <u>in</u> (<u>select</u> employee_id FROM employees WHERE depart ment_id <u>IN</u> (<u>SELECT</u> department_id FROM departments WHER E location_id <u>IN</u> (<u>select</u> location_id from locations where countr y_id='US')));



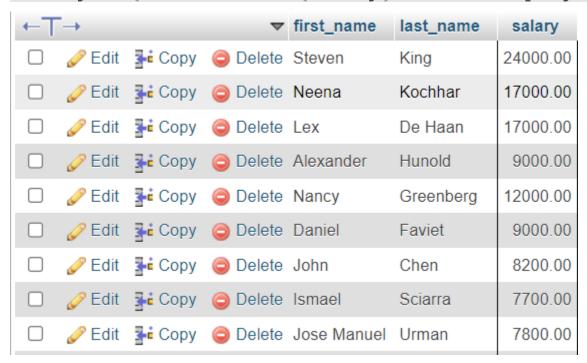
4. Write a query to find the name (first_name, last_name) of the employees who are managers.

SELECT first_name, last_name FROM employees WHERE (employee_id IN (SELECT manager_id FROM employees));



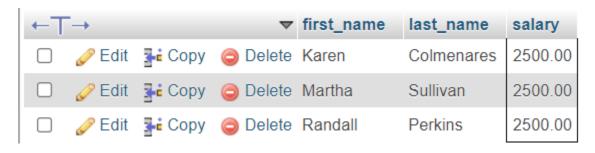
5. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is greater than the average salary.

SELECT first_name, last_name, salary FROM employees WHERE
salary > (SELECT AVG(salary) FROM employees);



6. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is equal to the minimum salary for their job grade.

SELECT first_name, last_name, salary FROM employees WHER
E employees.salary = (SELECT min_salary FROM jobs WHERE
employees.job_id = jobs.job_id);



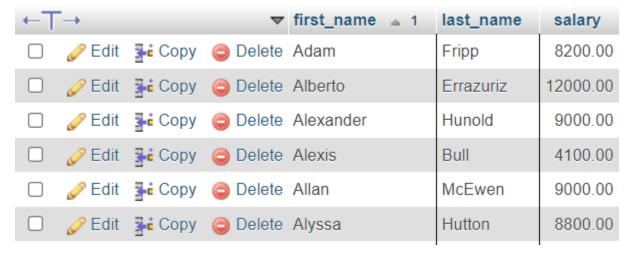
7. Write a query to find the name (first_name, last_name), and salary of the employees who earns more than the average salary and works in any of the IT departments.

SELECT first_name, last_name, salary FROM employees WHERE
department_id IN (SELECT department_id FROM departments
WHERE department_name LIKE 'IT%') AND salary > (SELECT
avg(salary) FROM employees);



8. Write a query to find the name (first_name, last_name), and salary of the employees who earns more than the earning of Mr. Bell.

SELECT first_name, last_name, salary FROM employees WHERE
salary > (SELECT salary FROM employees WHERE last_name
= 'Bell') ORDER BY first_name;



9. Write a query to find the name (first_name, last_name), and salary of the employees who earn the same salary as the minimum salary for all departments.

SELECT * FROM employees WHERE salary = (SELECT MIN(sal ary) FROM employees);



10. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is greater than the average salary of all departments.

SELECT * FROM employees WHERE salary > ALL(SELECT avg(sala
ry)FROM employees GROUP BY department_id);



11. Write a query to find the name (first_name, last_name) and salary of the employees who earn a salary that is higher than the salary of all the Shipping Clerk (JOB_ID = 'SH_CLERK'). Sort the results of the salary of the lowest to highest.

SELECT first_name,last_name, job_id, salary FROM employees
WHERE salary > ALL (SELECT salary FROM employees WHER
E job_id = 'SH_CLERK') ORDER BY salary;



12. Write a query to find the name (first_name, last_name) of the employees who are not supervisors.

SELECT b.first_name,b.last_name FROM employees b WHERE N
OT EXISTS (SELECT 'X' FROM employees a WHERE a.manager_i
d = b.employee_id);



13. Write a query to display the employee ID, first name, last name, and department names of all employees.

SELECT employee_id, first_name, last_name, (SELECT departm
ent_name FROM departments d WHERE e.department_id = d.d
epartment_id) department FROM employees e ORDER BY depa
rtment



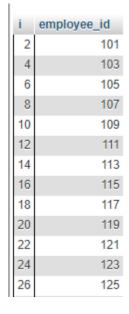
14. Write a query to display the employee ID, first name, last name, salary of all employees whose salary is above average for their departments.

SELECT employee_id, first_name FROM employees AS A WHER
E salary > (SELECT AVG(salary) FROM employees WHERE dep
artment_id = A.department_id);



15. Write a query to fetch even numbered records from employees table.

<u>SELECT</u> i, employee_id FROM (<u>SELECT</u> @i := @i + 1 AS i, employee_id FROM employees) a WHERE \underline{MOD} (a.i, 2) = 0;



16. Write a query to find the 5th maximum salary in the employees table

<u>SELECT</u> DISTINCT salary FROM employees e1 WHERE 5 = (<u>SELECT</u> <u>COUNT</u>(DISTINCT salary) FROM employees e2 WHERE e 2.salary >= e1.salary)



17. Write a query to find the 4th minimum salary in the employees table.

<u>SELECT</u> DISTINCT salary FROM employees e1 WHERE 4 = (<u>SELECT</u> <u>COUNT</u>(DISTINCT salary) FROM employees e2 WHERE e 2.salary <= e1.salary);</p>



18. Write a query to select last 10 records from a table

<u>SELECT</u> * FROM (<u>SELECT</u> * FROM employees ORDER BY employee_id DESC LIMIT 10) sub ORDER BY employee_id ASC;

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
197	Kevin	Feeney	KFEENEY	650.507.9822	1987-09-22	SH_CLERK	3000.00	0.00	124	50
198	Donald	OConnell	DOCONNEL	650.507.9833	1987-09-23	SH_CLERK	2600.00	0.00	124	50
199	Douglas	Grant	DGRANT	650.507.9844	1987-09-24	SH_CLERK	2600.00	0.00	124	50
200	Jennifer	Whalen	JWHALEN	515.123.4444	1987-09-25	AD_ASST	4400.00	0.00	101	10
201	Michael	Hartstein	MHARTSTE	515.123.5555	1987-09-26	MK_MAN	13000.00	0.00	100	20
202	Pat	Fay	PFAY	603.123.6666	1987-09-27	MK_REP	6000.00	0.00	201	20
203	Susan	Mavris	SMAVRIS	515.123.7777	1987-09-28	HR_REP	6500.00	0.00	101	40
204	Hermann	Baer	HBAER	515.123.8888	1987-09-29	PR_REP	10000.00	0.00	101	70
205	Shelley	Higgins	SHIGGINS	515.123.8080	1987-09-30	AC_MGR	12000.00	0.00	101	110
206	William	Gietz	WGIETZ	515.123.8181	1987-10-01	AC_ACCOUNT	8300.00	0.00	205	110

19. Write a query to list the department ID and name of all the departments where no employee is working.

SELECT * FROM departments WHERE department_id NOT IN (
select department_id FROM employees);



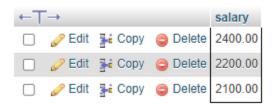
20. Write a query to get 3 maximum salaries.

<u>SELECT</u> DISTINCT salary FROM employees a WHERE 3 >= (<u>SELECT</u> <u>COUNT</u>(DISTINCT salary) FROM employees b WHERE b.s alary >= a.salary) ORDER BY a.salary DESC;



21. Write a query to get 3 minimum salaries

SELECT DISTINCT salary FROM employees a WHERE 3 >= (SE LECT COUNT(DISTINCT salary) FROM employees b WHERE b.s alary <= a.salary) ORDER BY a.salary DESC;</p>



22. Write a query to get nth max salaries of employees.

SELECT * FROM employees emp1 WHERE (1) = (SELECT COU
NT(DISTINCT(emp2.salary)) FROM employees emp2 WHERE
emp2.salary > emp1.salary)



MySQL JOINS

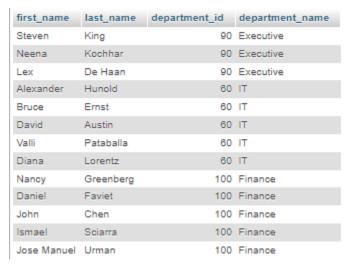
1. Write a query to find the addresses (location_id, street_address, city, state_province, country_name) of all the departments. Hint: Use NATURAL JOIN.

<u>SELECT</u> location_id, street_address, city, state_province, country_na me FROM locations NATURAL JOIN countries;



2. Write a query to find the name (first_name, last name), department ID and name of all the employees.

<u>SELECT</u> first_name, last_name, department_id, department_name
FROM employees JOIN departments USING (department_id)



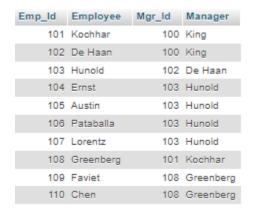
3. Write a query to find the name (first_name, last_name), job, department ID and name of the employees who works in London.

<u>SELECT</u> e.first_name, e.last_name, e.job_id, e.department_id, d.de partment_name FROM employees e JOIN departments d ON (e.de partment_id = d.department_id) JOIN locations l ON (d.location_i d = l.location_id) WHERE LOWER(l.city) = 'London';



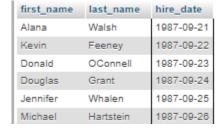
4. Write a query to find the employee id, name (last_name) along with their manager_id and name (last_name)

<u>SELECT</u> e.employee_id 'Emp_Id', e.last_name 'Employee', m.employee_id 'Mgr_Id', m.last_name 'Manager' FROM employees e join employees m ON (e.manager_id = m.employee_id)



5. Write a query to find the name (first_name, last_name) and hire date of the employees who was hired after 'Jones'.'

<u>SELECT</u> e.first_name, e.last_name, e.hire_date FROM employees e JOIN employees davies ON (davies.last_name = 'Jones') WHERE davies.hire_date < e.hire_date;



6. Write a query to get the department name and number of employees in the department.

SELECT department_name AS 'Department Name', COUNT(*) AS 'No of Employees' FROM departments INNER JOIN employees ON employees.d epartment_id = departments.department_id GROUP BY departments.department_id, department_name ORDER BY department_name;



7. Write a query to find the employee ID, job title, number of days between ending date and starting date for all jobs in department 90.

SELECT employee_id, job_title, end_datestart_date Days FROM job_history NATURAL JOIN jobs WHERE departm
ent_id=90

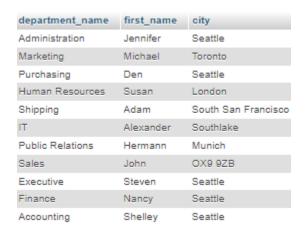
8. Write a query to display the department ID and name and first name of manager.

SELECT d.department_id, d.department_name, d.manager_id, e.fir
st_name FROM departments d INNER JOIN employees e ON (d.m
anager_id = e.employee_id);



9. Write a query to display the department name, manager name, and city.

<u>SELECT</u> d.department_name, e.first_name, l.city FROM departme nts d JOIN employees e ON (d.manager_id = e.employee_id) JOIN locations l USING (location_id)



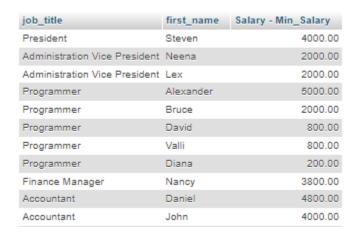
10. Write a query to display the job title and average salary of employees.

<u>SELECT</u> job_title, <u>AVG</u>(salary) FROM employees NATURAL JOIN jobs GR OUP BY job_title;

job_title	AVG(salary)
Accountant	7920.000000
Accounting Manager	12000.000000
Administration Assistant	4400.000000
Administration Vice President	17000.000000
Finance Manager	12000.000000
Human Resources Representative	6500.000000
Marketing Manager	13000.000000
Marketing Representative	6000.000000
President	24000.000000
Programmer	5760.000000
Public Accountant	8300.000000
Public Relations Representative	10000.000000
Purchasing Clerk	2780.000000
Purchasing Manager	11000.000000

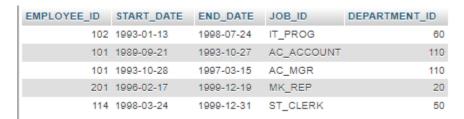
11. Write a query to display job title, employee name, and the difference between salary of the employee and minimum salary for the job.

SELECT job_title, first_name, salary-min_salary 'Salary - Min_Salary' FROM employees NATURAL JOIN jobs;



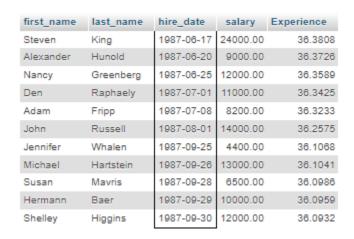
12. Write a query to display the job history that were done by any employee who is currently drawing more than 10000 of salary.

<u>SELECT</u> jh.* FROM job_history jh JOIN employees e ON (jh.employee_id = e.employee_id) WHERE salary > 10000;



13. Write a query to display department name, name (first_name, last_name), hire date, salary of the manager for all managers whose experience is more than 15 years.

SELECT first_name, last_name, hire_date, salary, (DATEDIFF(now (), hire_date))/365 Experience FROM departments d JOIN emplo yees e ON (d.manager_id = e.employee_id) WHERE (DATEDIFF(now(), hire_date))/365>15



1. Write a query to display the first day of the month (in datetime format) three months before the current month.

Sample current date: 2014-09-03

Expected result: 2014-06-01

SELECT date(((PERIOD_ADD (EXTRACT(YEAR_MONTH FROM CURD
ATE()),-3)*100)+1)) AS Date;

2. Write a query to get the distinct Mondays from hire_date in employees tables.

SELECT DISTINCT(STR_TO_DATE (CONCAT(YEARWEEK(hire_date),'1
'),'%x%v%w')) FROM employees

HIRE_DATE 1987-06-08 1987-06-15 1987-06-22 1987-06-29 1987-07-06 1987-07-13 1987-07-20 1987-07-27 1987-08-03 1987-08-10

3. Write a query to get the first day of the current year

SELECT MAKEDATE(EXTRACT(YEAR FROM CURDATE()),1) AS first_
date_of_year;

first_date_of_year 2023-01-01

4. Write a query to get the last day of the current year.

SELECT STR_TO_DATE(CONCAT(12,31, EXTRACT(YEAR FROM CURD
ATE())), '%m%d%Y') AS last_day_of_year;

```
last_day_of_year
2023-12-31
```

5. Write a query to calculate the age in year

<u>SELECT</u> YEAR(<u>CURRENT_TIMESTAMP</u>) - YEAR("2003-01-27") - (<u>RIGHT(CURRENT_TIMESTAMP</u>, 5) < <u>RIGHT("2003-01-27", 5)</u>) as age;

age

6. Write a query to get the current date in the following format.

Sample date : 2014-09-04 Output : September 4, 2014

SELECT DATE_FORMAT(CURDATE(),'%M %e, %Y') AS 'Current_date';

```
Current_date
October 28, 2023
```

7. Write a query to get the current date in Thursday September 2014 format.

Thursday September 2014

```
SELECT DATE_FORMAT(NOW(), '%W %M %Y');
DATE_FORMAT(NOW(), '%W %M %Y')
Saturday October 2023
```

8. Write a query to extract the year from the current date.

```
SELECT EXTRACT(YEAR FROM NOW());
year
 2023
```

9. Write a query to get the DATE value from a given day (number in N).

Sample days: 730677 Output: 2000-07-11



10. Write a query to get the first name and hire date from employees table where hire date between '1987-06-01' and '1987-07-30'

SELECT FIRST_NAME, HIRE_DATE FROM employees WHERE HIRE_D ATE BETWEEN '1987-06-01 00:00:00' AND '1987-07-30 23:59:59';



11. Write a query to display the current date in the following format. Sample output: Thursday 4th September 2014 00:00:00

```
SELECT date_format(CURDATE(),'%W %D %M %Y %T');
 date_format(CURDATE(),'%W %D %M %Y %T')
 Saturday 28th October 2023 00:00:00
```

12. Write a query to display the current date in the following format. Sample output: 05/09/2014

```
SELECT date_format(CURDATE(),'%d/%m/%Y');

date_format(CURDATE(),'%d/%m/%Y')
28/10/2023
```

13. Write a query to display the current date in the following format. Sample output: 12:00 AM Sep 5, 2014

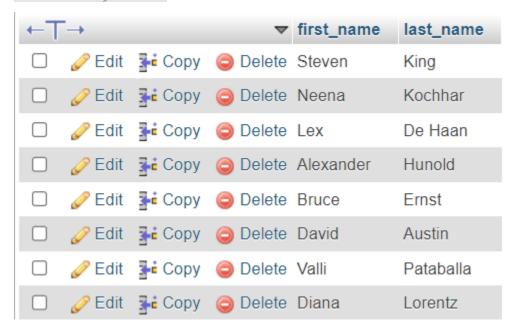
```
SELECT date_format(CURDATE(),'%l:%i %p %b %e, %Y') AS today;

today

12:00 AM Oct 28, 2023
```

14. Write a query to get the firstname, lastname who joined in the month of June

SELECT first_name, last_name FROM employees WHERE MONTH(HIR
E_DATE) = 6;



16. Write a query to get the years in which more than 10 employees joined.

```
SELECT DATE_FORMAT(HIRE_DATE,'%Y') FROM employees GROUP B
Y DATE_FORMAT(HIRE_DATE,'%Y') HAVING COUNT(EMPLOYEE_ID)
> 10;

DATE_FORMAT(HIRE_DATE,'%Y')
1987
```

17. Write a query to get first name of employees who joined in 1987.

SELECT FIRST_NAME, HIRE_DATE FROM employees WHERE YEAR(HIRE_D
ATE)=1987;



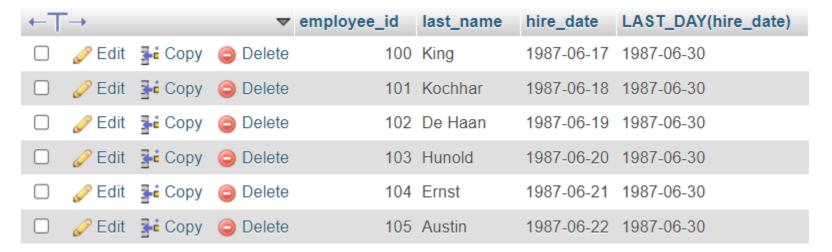
18. Write a query to get department name, manager name, and salary of the manager for all managers whose experience is more than 5 years.

<u>SELECT</u> DEPARTMENT_NAME, FIRST_NAME, SALARY FROM departments D JOIN employees E ON (D.MANAGER_ID=E.MANAGER_ID) WHERE (SYSDATE ()-HIRE_DATE) / 365 > 5;

DEPARTMENT_NAME	FIRST_NAME	SALARY
Marketing	Pat	6000.00
Purchasing	Alexander	3100.00
Purchasing	Shelli	2900.00
Purchasing	Sigal	2800.00
Purchasing	Guy	2600.00
Purchasing	Karen	2500.00
Shipping	Laura	3300.00
Shipping	Mozhe	2800.00
Shipping	James	2500.00
Shipping	TJ	2100.00

19. Write a query to get employee ID, last name, and date of first salary of the employees.

SELECT employee_id, last_name, hire_date, LAST_DAY(hire_date) FROM em ployees;



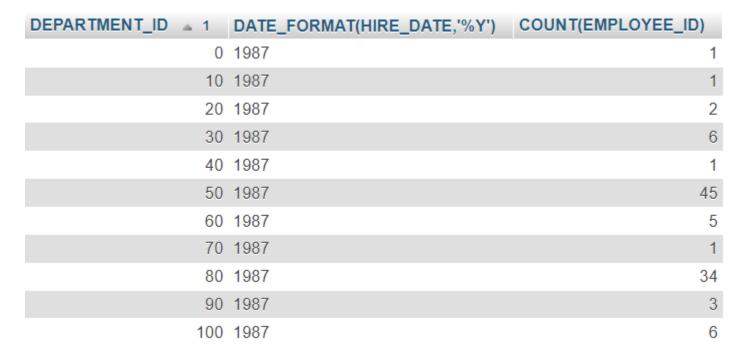
20. Write a query to get first name, hire date and experience of the employees.

SELECT FIRST_NAME, SYSDATE(), HIRE_DATE, DATEDIFF(SYSDATE(), hire date)/365 FROM employees;



21. Write a query to get the department ID, year, and number of employees joined.

<u>SELECT</u> DEPARTMENT_ID, DATE_FORMAT(HIRE_DATE,'%Y'), <u>COUNT</u>(EMPL OYEE_ID) FROM employees GROUP BY DEPARTMENT_ID, DATE_FORMAT(HIRE_DATE, '%Y') ORDER BY DEPARTMENT_ID;

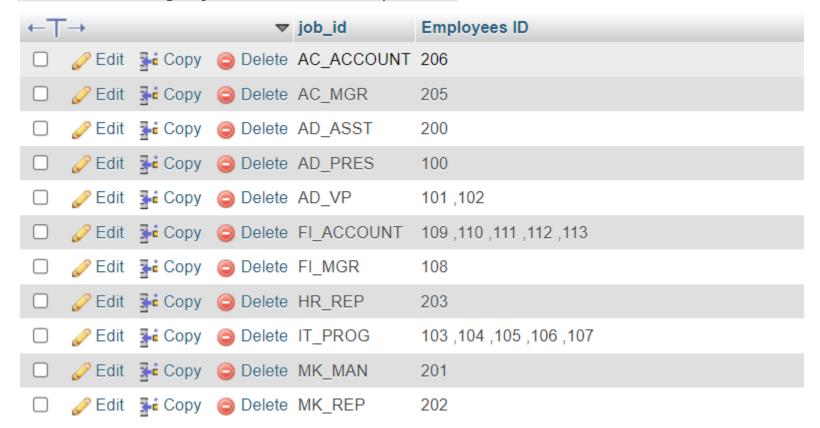


• <u>e--</u>

MySQL String

1. Write a query to get the job_id and related employee's id.

<u>SELECT</u> job_id, <u>GROUP_CONCAT</u>(employee_id, ' ') '<u>Employees</u>
<u>ID' FROM</u> employees GROUP BY job_id;



2. Write a query to update the portion of the phone_number in the employees table, within the phone number the substring '124' will be replaced by '999'.

<u>UPDATE</u> employees <u>SET</u> phone_number = <u>REPLACE</u>(phone_number, '124', '999') WHERE phone_number <u>LIKE</u> '%124%';

3. Write a query to get the details of the employees where the length of the first name greater than or equal to 8.

SELECT * FROM employees WHERE LENGTH(first_name) >= 8;



4. Write a query to display leading zeros before maximum and minimum salary.

SELECT job_id, LPAD(max_salary, 7, '0') ' Max
Salary', LPAD(min_salary, 7, '0') ' Min Salary' FROM jobs;



5. Write a query to append '@example.com' to email field.

<u>UPDATE</u> employees <u>SET</u> email = CONCAT(email, '@example.com');

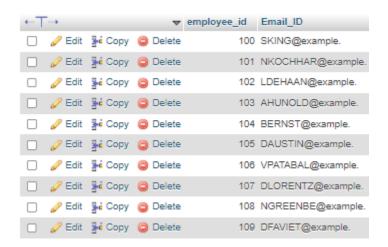
6. Write a query to get the employee id, first name and hire month.

SELECT employee_id, first_name, MID(hire_date, 6, 2) as hire_month
FROM employees;



7. Write a query to get the employee id, email id (discard the last three characters).

SELECT employee_id, REVERSE(SUBSTR(REVERSE(email), 4)) as Em
ail_ID from employees;



8. Write a query to find all employees where first names are in upper case

SELECT * FROM employees WHERE first_name = BINARY UPPER(firs
t_name);



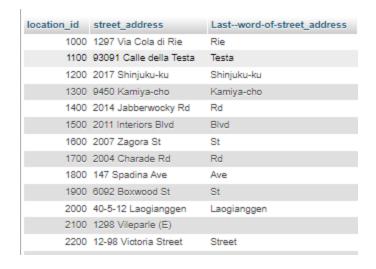
9. Write a query to extract the last 4 character of phone numbers.

<u>SELECT RIGHT</u>(phone_number, 4) as 'Ph.No.' FROM employees;



10. Write a query to get the last word of the street address

```
SELECT location_id, street_address, SUBSTRING_INDEX(REPLACE(RE
PLACE(REPLACE(street_address,',',' '),')',' '),'(',' '),' ',-1) AS 'Last--
word-of-street_address' FROM locations;
```



11. Write a query to get the locations that have minimum street length.

SELECT * FROM locations WHERE LENGTH(street_address) <= (SEL
ECT MIN(LENGTH(street_address)) FROM locations);</pre>



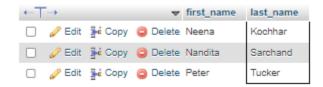
12. Write a query to display the first word from those job titles which contains more than one words.

SELECT job_title, SUBSTR(job_title,1, INSTR(job_title, ' ')1) FROM jobs;



13. Write a query to display the length of first name for employees where last name contain character 'c' after 2nd position

SELECT first_name, last_name FROM employees WHERE INSTR(last_ name,'C') > 2;



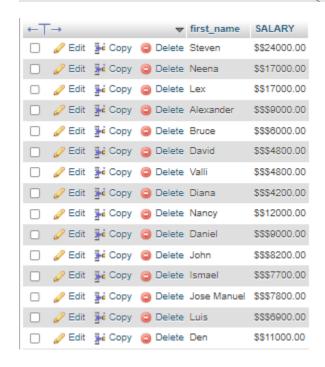
14. Write a query that displays the first name and the length of the first name for all employees whose name starts with the letters 'A', 'J' or 'M'. Give each column an appropriate label. Sort the results by the employees' first names.

<u>SELECT</u> first_name "Name", LENGTH(first_name) "Length" FROM em ployees WHERE first_name <u>LIKE</u> 'J%' <u>OR</u> first_name <u>LIKE</u> 'M%' <u>OR</u> first_name <u>LIKE</u> 'A%' ORDER BY first_name;



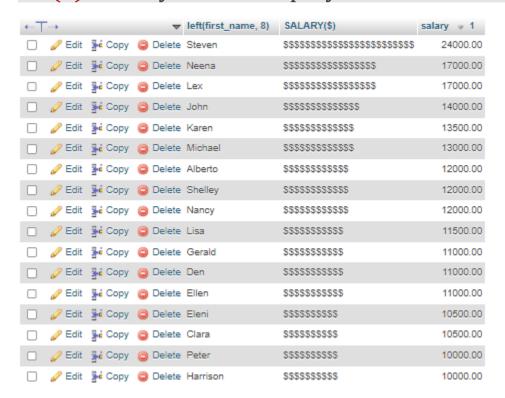
15. Write a query to display the first name and salary for all employees. Format the salary to be 10 characters long, left-padded with the \$ symbol. Label the column SALARY.

SELECT first_name, LPAD(salary, 10, '\$') SALARY FROM employees;



16. Write a query to display the first eight characters of the employees' first names and indicates the amounts of their salaries with '\$' sign. Each '\$' sign signifies a thousand dollars. Sort the data in descending order of salary.

SELECT left(first_name, 8), REPEAT('\$', FLOOR(salary/1000)) 'SALA RY(\$)', salary FROM employees ORDER BY salary DESC;



17. Write a query to display the employees with their code, first name, last name and hire date who hired either on seventh day of any month or seventh month in any year.

Sample table: employees

SELECT employee_id,first_name,last_name,hire_date FROM employee
s WHERE POSITION("07" IN DATE_FORMAT(hire_date, '%d %m
%Y'))>0;

