**Лабораторная работа № 5 СХЕМА HR**

**Просмотрите следующие запросы**

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| **Отображение сведений о рабочих местах, где минимальная зарплата превышает 10000**  SELECT \* FROM JOBS WHERE MIN\_SALARY > 10000 |
| **Отображение имени и даты сотрудников, принятых на работу в период с 2002 по 2005 год.**  SELECT FIRST\_NAME, HIRE\_DATE FROM EMPLOYEES  WHERE TO\_CHAR(HIRE\_DATE, 'YYYY') BETWEEN 2002 AND 2005 ORDER BY HIRE\_DATE |
| **Отображение имени и даты поступления на работу сотрудников, которые являются либо ИТ-программистом, либо продавцом.**  SELECT FIRST\_NAME, HIRE\_DATE  FROM EMPLOYEES WHERE JOB\_ID IN ('IT\_PROG', 'SA\_MAN') |
| **Отображение сотрудников, поступивших на работу после 1 января 2008 года**  SELECT \* FROM EMPLOYEES where hire\_date > '01.01.2008' |
| **Отображение сведений о сотруднике с идентификатором 150 или 160.**  SELECT \* FROM EMPLOYEES WHERE EMPLOYEE\_ID in (150,160) |
| **Отображение имени, зарплаты, комиссии ptc и даты найма для сотрудников с зарплатой менее 10000**  SELECT FIRST\_NAME, SALARY, COMMISSION\_PCT, HIRE\_DATE FROM EMPLOYEES WHERE SALARY < 10000 |
| **Отображение названия должности, разницы между минимальной и максимальной зарплатой для вакансий с максимальной зарплатой в диапазоне от 10000 до 20000**  SELECT JOB\_TITLE, MAX\_SALARY-MIN\_SALARY DIFFERENCE FROM JOBS WHERE MAX\_SALARY BETWEEN 10000 AND 20000 |
| **Отобразите имя, зарплату и округлите зарплату до тысячи**  SELECT FIRST\_NAME, SALARY, ROUND(SALARY, -3) FROM EMPLOYEES |
| **Отображение сведений о заданиях по алфавиту (убывание).**  SELECT \* FROM JOBS ORDER BY JOB\_TITLE |
| **Отображение сотрудников, где имя или фамилия начинаются с S**  SELECT FIRST\_NAME, LAST\_NAME FROM EMPLOYEES WHERE FIRST\_NAME LIKE 'S%' OR LAST\_NAME LIKE 'S%' |
| **Отображение сотрудников, которые были приняты на работу в мае месяце**  SELECT \* FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE, 'MM')= '05' |
| **Отображение сведений о сотрудниках, где процент комиссии равен нулю и зарплата в диапазоне от 5000 до 10000 и отдел 30**  SELECT \* FROM EMPLOYEES WHERE COMMISSION\_PCT IS NULL AND SALARY BETWEEN 5000 AND 10000 AND DEPARTMENT\_ID=30 |
| **Отображение имени и даты первой зарплаты сотрудников**  SELECT FIRST\_NAME, HIRE\_DATE, LAST\_DAY(HIRE\_DATE)+1 FROM EMPLOYEES |
| **Отображение имени и опыта сотрудников**  SELECT FIRST\_NAME, HIRE\_DATE, FLOOR((SYSDATE-HIRE\_DATE)/365)FROM EMPLOYEES |
| **Отображение имени сотрудников, принятых на работу в 2001 году**  SELECT FIRST\_NAME, HIRE\_DATE FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE, 'YYYY')=2001 |
| **Отображение имени и фамилии после преобразования первой буквы каждого имени в верхний регистр, а остальные в нижний регистр**  SELECT INITCAP(FIRST\_NAME), INITCAP(LAST\_NAME) FROM EMPLOYEES |
| **Отображение первого слова в названии должности**  SELECT JOB\_TITLE, SUBSTR(JOB\_TITLE,1, INSTR(JOB\_TITLE, ' ')-1) FROM JOBS |
| **Отображение длины имени для сотрудников, где фамилия содержит символ ' b ' после 3-й позиции**  SELECT FIRST\_NAME, LAST\_NAME FROM EMPLOYEES WHERE INSTR(LAST\_NAME,'B') > 3 |
| **Отображать имя в верхнем регистре и адрес электронной почты в нижнем регистре для сотрудников, где имя и адрес электронной почты одинаковы независимо от регистра**  SELECT UPPER(FIRST\_NAME), LOWER(EMAIL) FROM EMPLOYEES WHERE UPPER(FIRST\_NAME)= UPPER(EMAIL) |
| **Отображение сотрудников, поступивших на работу в текущем году**  SELECT \* FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE,'YYYY')=TO\_CHAR(SYSDATE, 'YYYY') |
| **Отображение количества дней между системной датой и 1 января 2011**  SELECT SYSDATE - to\_date('01.01.2011') FROM DUAL |
| **Отображение количества сотрудников, поступивших на работу в каждом месяце текущего года**  SELECT TO\_CHAR(HIRE\_DATE,'MM'), COUNT (\*) FROM EMPLOYEES  WHERE TO\_CHAR(HIRE\_DATE,'YYYY')= TO\_CHAR(SYSDATE,'YYYY') GROUP BY TO\_CHAR(HIRE\_DATE,'MM') |
| **Отображение идентификатора менеджера и количества сотрудников, управляемых менеджером**  SELECT MANAGER\_ID, COUNT(\*) FROM EMPLOYEES GROUP BY MANAGER\_ID |
| **Отображение идентификатора сотрудника и даты окончания его предыдущей работы**  SELECT EMPLOYEE\_ID, MAX(END\_DATE) FROM JOB\_HISTORY GROUP BY EMPLOYEE\_ID |
| **ПРОАНАЛИЗИРОВАТЬ СЕМАНТИКУ ЗАПРОСОВ, ВСТАВОК, УНИЧТОЖЕНИЙ**  Display number of employees joined after 15th of the month.  SELECT COUNT(\*) FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE,'DD') > 15  Display the country ID and number of cities we have in the country.  SELECT COUNTRY\_ID, COUNT(\*) FROM LOCATIONS GROUP BY COUNTRY\_ID  Display average salary of employees in each department who have commission percentage.  SELECT DEPARTMENT\_ID, AVG(SALARY) FROM EMPLOYEES  WHERE COMMISSION\_PCT IS NOT NULL GROUP BY DEPARTMENT\_ID  Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job.  SELECT JOB\_ID, COUNT(\*), SUM(SALARY), MAX(SALARY)-MIN(SALARY) SALARY FROM EMPLOYEES GROUP BY JOB\_ID  Display job ID for jobs with average salary more than 10000.  SELECT JOB\_ID, AVG(SALARY) FROM EMPLOYEES  GROUP BY JOB\_ID  HAVING AVG(SALARY)>10000  Display years in which more than 10 employees joined.  SELECT TO\_CHAR(HIRE\_DATE,'YYYY') FROM EMPLOYEES  GROUP BY TO\_CHAR(HIRE\_DATE,'YYYY')  HAVING COUNT(EMPLOYEE\_ID) > 10  Display departments in which more than five employees have commission percentage.  SELECT DEPARTMENT\_ID FROM EMPLOYEES  WHERE COMMISSION\_PCT IS NOT NULL  GROUP BY DEPARTMENT\_ID  HAVING COUNT(COMMISSION\_PCT)>5  Display employee ID for employees who did more than one job in the past.  SELECT EMPLOYEE\_ID FROM JOB\_HISTORY GROUP BY EMPLOYEE\_ID HAVING COUNT(\*) > 1  Display job ID of jobs that were done by more than 3 employees for more than 100 days.  SELECT JOB\_ID FROM JOB\_HISTORY  WHERE END\_DATE-START\_DATE > 100  GROUP BY JOB\_ID  HAVING COUNT(\*)>3  Display department ID, year, and Number of employees joined.  SELECT DEPARTMENT\_ID, TO\_CHAR(HIRE\_DATE,'YYYY'), COUNT(EMPLOYEE\_ID)  FROM EMPLOYEES  GROUP BY DEPARTMENT\_ID, TO\_CHAR(HIRE\_DATE, 'YYYY')  ORDER BY DEPARTMENT\_ID  Display departments where any manager is managing more than 5 employees.  SELECT DISTINCT DEPARTMENT\_ID  FROM EMPLOYEES  GROUP BY DEPARTMENT\_ID, MANAGER\_ID  HAVING COUNT(EMPLOYEE\_ID) > 5  Change salary of employee 115 to 8000 if the existing salary is less than 6000.  UPDATE EMPLOYEES SET SALARY = 8000 WHERE EMPLOYEE\_ID = 115 AND SALARY < 6000  Insert a new employee into employees with all the required details.  INSERT INTO EMPLOYEES (EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, EMAIL, PHONE\_NUMBER, HIRE\_DATE,JOB\_ID, SALARY, DEPARTMENT\_ID)  VALUES (207, 'ANGELA', 'SNYDER','ANGELA','215 253 4737', SYSDATE, 'SA\_MAN', 12000, 80)  Delete department 20.  DELETE FROM DEPARTMENTS WHERE DEPARTMENT\_ID=20  Change job ID of employee 110 to IT\_PROG if the employee belongs to department 10 and the existing job ID does not start with IT.  UPDATE EMPLOYEES SET JOB\_ID= 'IT\_PROG'  WHERE EMPLOYEE\_ID=110 AND DEPARTMENT\_ID=10 AND NOT JOB\_ID LIKE 'IT%'  Insert a row into departments table with manager ID 120 and location ID in any location ID for city Tokyo.  INSERT INTO DEPARTMENTS (150,'SPORTS',120,1200)  Display department name and number of employees in the department.  SELECT DEPARTMENT\_NAME, COUNT(\*) FROM EMPLOYEES NATURAL JOIN DEPARTMENTS GROUP BY DEPARTMENT\_NAME  Display job title, employee ID, number of days between ending date and starting date for all jobs in department 30 from job history.  SELECT EMPLOYEE\_ID, JOB\_TITLE, END\_DATE-START\_DATE DAYS  FROM JOB\_HISTORY NATURAL JOIN JOBS  WHERE DEPARTMENT\_ID=30  Display department name and manager first name.  SELECT DEPARTMENT\_NAME, FIRST\_NAME FROM DEPARTMENTS D JOIN EMPLOYEES E ON (D.MANAGER\_ID=E.EMPLOYEE\_ID)  Display department name, manager name, and city.  SELECT DEPARTMENT\_NAME, FIRST\_NAME, CITY FROM DEPARTMENTS D JOIN EMPLOYEES E ON (D.MANAGER\_ID=E.EMPLOYEE\_ID) JOIN LOCATIONS L USING (LOCATION\_ID)  Display country name, city, and department name.  SELECT COUNTRY\_NAME, CITY, DEPARTMENT\_NAME  FROM COUNTRIES JOIN LOCATIONS USING (COUNTRY\_ID)  JOIN DEPARTMENTS USING (LOCATION\_ID)  Display job title, department name, employee last name, starting date for all jobs from 2000 to 2005.  SELECT JOB\_TITLE, DEPARTMENT\_NAME, LAST\_NAME, START\_DATE  FROM JOB\_HISTORY JOIN JOBS USING (JOB\_ID) JOIN DEPARTMENTS  USING (DEPARTMENT\_ID) JOIN EMPLOYEES USING (EMPLOYEE\_ID)  WHERE TO\_CHAR(START\_DATE,'YYYY') BETWEEN 2000 AND 2005  Display job title and average salary of employees  SELECT JOB\_TITLE, AVG(SALARY) FROM EMPLOYEES  NATURAL JOIN JOBS GROUP BY JOB\_TITLE  Display job title, employee name, and the difference between maximum salary for the job and salary of the employee.  SELECT JOB\_TITLE, FIRST\_NAME, MAX\_SALARY-SALARY DIFFERENCE FROM EMPLOYEES NATURAL JOIN JOBS  Display last name, job title of employees who have commission percentage and belongs to department 30.  SELECT JOB\_TITLE, FIRST\_NAME, MAX\_SALARY-SALARY DIFFERENCE FROM EMPLOYEES NATURAL JOIN JOBS WHERE DEPARTMENT\_ID = 30  Display details of jobs that were done by any employee who is currently drawing more than 15000 of salary.  SELECT JH.\*  FROM JOB\_HISTORY JH JOIN EMPLOYEES E ON (JH.EMPLOYEE\_ID = E.EMPLOYEE\_ID)  WHERE SALARY > 15000  Display department name, manager name, and salary of the manager for all managers whose experience is more than 5 years.  SELECT DEPARTMENT\_NAME, FIRST\_NAME, SALARY  FROM DEPARTMENTS D JOIN EMPLOYEES E ON (D.MANAGER\_ID=E.MANAGER\_ID)  WHERE (SYSDATE-HIRE\_DATE) / 365 > 5  Display employee name if the employee joined before his manager.  SELECT FIRST\_NAME FROM EMPLOYEES E1 JOIN EMPLOYEES E2 ON (E1.MANAGER\_ID=E2.EMPLOYEE\_ID)  WHERE E1.HIRE\_DATE < E2.HIRE\_DATE  Display employee name, job title for the jobs employee did in the past where the job was done less than six months.  SELECT FIRST\_NAME, JOB\_TITLE FROM EMPLOYEES E JOIN JOB\_HISTORY JH ON (JH.EMPLOYEE\_ID = E.EMPLOYEE\_ID) JOIN JOBS J ON( JH.JOB\_ID = J.JOB\_ID)  WHERE MONTHS\_BETWEEN(END\_DATE,START\_DATE) < 6  Display employee name and country in which he is working.  SELECT FIRST\_NAME, COUNTRY\_NAME FROM EMPLOYEES JOIN DEPARTMENTS USING(DEPARTMENT\_ID)  JOIN LOCATIONS USING( LOCATION\_ID)  JOIN COUNTRIES USING ( COUNTRY\_ID)  Display department name, average salary and number of employees with commission within the department.    SELECT DEPARTMENT\_NAME, AVG(SALARY), COUNT(COMMISSION\_PCT)  FROM DEPARTMENTS JOIN EMPLOYEES USING (DEPARTMENT\_ID)  GROUP BY DEPARTMENT\_NAME  Display the month in which more than 5 employees joined in any department located in Sydney.  SELECT TO\_CHAR(HIRE\_DATE,'MON-YY')  FROM EMPLOYEES JOIN DEPARTMENTS USING (DEPARTMENT\_ID) JOIN LOCATIONS USING (LOCATION\_ID)  WHERE CITY = 'Seattle'  GROUP BY TO\_CHAR(HIRE\_DATE,'MON-YY')  HAVING COUNT(\*) > 5  Display details of departments in which the maximum salary is more than 10000.  SELECT \* FROM DEPARTMENTS WHERE DEPARTMENT\_ID IN  ( SELECT DEPARTMENT\_ID FROM EMPLOYEES  GROUP BY DEPARTMENT\_ID  HAVING MAX(SALARY)>10000)  Display details of departments managed by ‘Smith’.  SELECT \* FROM DEPARTMENTS WHERE MANAGER\_ID IN  (SELECT EMPLOYEE\_ID FROM EMPLOYEES WHERE FIRST\_NAME='SMITH')  Display jobs into which employees joined in the current year.  SELECT \* FROM JOBS WHERE JOB\_ID IN  (SELECT JOB\_ID FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE,'YYYY')=TO\_CHAR(SYSDATE,'YYYY'))  Display employees who did not do any job in the past.  SELECT \* FROM EMPLOYEES WHERE EMPLOYEE\_ID NOT IN  (SELECT EMPLOYEE\_ID FROM JOB\_HISTORY)  Display job title and average salary for employees who did a job in the past.  SELECT JOB\_TITLE, AVG(SALARY) FROM JOBS NATURAL JOIN EMPLOYEES  GROUP BY JOB\_TITLE  WHERE EMPLOYEE\_ID IN  (SELECT EMPLOYEE\_ID FROM JOB\_HISTORY)  Display country name, city, and number of departments where department has more than 5 employees.  SELECT COUNTRY\_NAME, CITY, COUNT(DEPARTMENT\_ID)  FROM COUNTRIES JOIN LOCATIONS USING (COUNTRY\_ID) JOIN DEPARTMENTS USING (LOCATION\_ID)  WHERE DEPARTMENT\_ID IN  (SELECT DEPARTMENT\_ID FROM EMPLOYEES  GROUP BY DEPARTMENT\_ID  HAVING COUNT(DEPARTMENT\_ID)>5)  GROUP BY COUNTRY\_NAME, CITY;  Display details of manager who manages more than 5 employees.  SELECT FIRST\_NAME FROM EMPLOYEES  WHERE EMPLOYEE\_ID IN  (SELECT MANAGER\_ID FROM EMPLOYEES  GROUP BY MANAGER\_ID  HAVING COUNT(\*)>5)    Display employee name, job title, start date, and end date of past jobs of all employees with commission percentage null.  SELECT FIRST\_NAME, JOB\_TITLE, START\_DATE, END\_DATE  FROM JOB\_HISTORY JH JOIN JOBS J USING (JOB\_ID) JOIN EMPLOYEES E ON ( JH.EMPLOYEE\_ID = E.EMPLOYEE\_ID)  WHERE COMMISSION\_PCT IS NULL  Display the departments into which no employee joined in last two years.  SELECT \* FROM DEPARTMENTS  WHERE DEPARTMENT\_ID NOT IN  ( SELECT DEPARTMENT\_ID FROM EMPLOYEES WHERE FLOOR((SYSDATE-HIRE\_DATE)/365) < 2)  Display the details of departments in which the max salary is greater than 10000 for employees who did a job in the past.  SELECT \* FROM DEPARTMENTS  WHERE DEPARTMENT\_ID IN  (SELECT DEPARTMENT\_ID FROM EMPLOYEES  WHERE EMPLOYEE\_ID IN (SELECT EMPLOYEE\_ID FROM JOB\_HISTORY)  GROUP BY DEPARTMENT\_ID  HAVING MAX(SALARY) >10000)  Display details of current job for employees who worked as IT Programmers in the past.  SELECT \* FROM JOBS  WHERE JOB\_ID IN  (SELECT JOB\_ID FROM EMPLOYEES WHERE EMPLOYEE\_ID IN  (SELECT EMPLOYEE\_ID FROM JOB\_HISTORY WHERE JOB\_ID='IT\_PROG'))  Display the details of employees drawing the highest salary in the department.  SELECT DEPARTMENT\_ID,FIRST\_NAME, SALARY FROM EMPLOYEES OUTER WHERE SALARY =  (SELECT MAX(SALARY) FROM EMPLOYEES WHERE DEPARTMENT\_ID = OUTER.DEPARTMENT\_ID)  Display the city of employee whose employee ID is 105.  SELECT CITY FROM LOCATIONS WHERE LOCATION\_ID =  (SELECT LOCATION\_ID FROM DEPARTMENTS WHERE DEPARTMENT\_ID =  (SELECT DEPARTMENT\_ID FROM EMPLOYEES WHERE EMPLOYEE\_ID=105)  )  Display third highest salary of all employees  select salary  from employees main  where 2 = (select count( distinct salary )  from employees  where salary > main.salary) |