

RESTRICTING AND SORTING DATA - WORKSHEET

1. Create a new query file and name it *Restrict_Sort_worksheet.sql*. Before writing the solution of each question make sure to include the question number as an in-line comment.
2. Write a query that displays a report with the surname and the salary of the employees who earn more than 12,000. You are to make sure that the columns are named as shown in the screenshot below and the number of rows is also correct.

	Surname	Salary > 12000
1	King	24000.00
2	Kochhar	17000.00
3	De Haan	17000.00
4	Russell	14000.00
5	Partners	13500.00
6	Hartstein	13000.00

6 rows returned

3. Write a query that will display all the information related to employee number 176.

	employee_id	first_name	last_name	email	phone_number
1	176	Jonathon	Taylor	JTAYLOR	011.44.1644.429265

hire_date	job_id	salary	commission_pct	manager_id	department_id
1998-03-24 00:00:00.000	SA_REP	8600.00	0.20	149	80

1 row returned

4. Modify the query in question 2, such that the salary is not in the range of 5,000 and 12,000.

	Surname	Salary > 12000
1	King	24000.00
2	Kochhar	17000.00
3	De Haan	17000.00
4	Austin	4800.00
5	Pataballa	4800.00
6	Lorentz	4200.00

♦♦♦♦

55 rows returned

5. You are to create a report to display the surname, job number and start date for the employees with a surname of Matos and Taylor.

	Surname	Job #	Start Date
1	Matos	ST_CLERK	1998-03-15 00:00:00.000
2	Taylor	SA_REP	1998-03-24 00:00:00.000
3	Taylor	SH_CLERK	1998-01-24 00:00:00.000

3 rows returned

6. Modify the query in question 5, such that the result obtained is sorted using the second column in ascending order.

	Surname	Job #	Start Date
1	Taylor	SA_REP	1998-03-24 00:00:00.000
2	Taylor	SH_CLERK	1998-01-24 00:00:00.000
3	Matos	ST_CLERK	1998-03-15 00:00:00.000

3 rows returned

7. Create a query that shows the surname and the department number of all the employees in department 20 or 50. Sort the answer such that the first employee in the list has the smallest department number but largest surname

	Surname	Dep #
1	Hartstein	20
2	Fay	20
3	Weiss	50
4	Walsh	50
5	Vollman	50
6	Vargas	50

....

47 rows returned

8. Modify question 4 such that the salary range of the employees is between 5,000 and 12,000, and are in department 20 and 50.

	Surname	Salary > 12000
1	Weiss	8000.00
2	Fripp	8200.00
3	Kaufling	7900.00
4	Vollman	6500.00

....

6 rows returned

9. Write a query that will display the employee number, full employee name and surname (separated by a blank space) and hire date for all those employees who started working in 1994. You are to sort the rows such that the employee at the very top is the first worker engaged in 1994.

	Emp #	Employee Name	Start Date
1	203	Susan Mavris	1994-06-07 00:00:00.000
2	204	Hermann Baer	1994-06-07 00:00:00.000
3	205	Shelley Higgins	1994-06-07 00:00:00.000
4	206	William Gietz	1994-06-07 00:00:00.000
5	109	Daniel Faviet	1994-08-16 00:00:00.000

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7 rows returned

10. Write a query that will display the surname and job title of all the employees who do not have a manager.

	last_name	job_id
1	King	AD_PRES

1 rows returned

11. Write the SQL statement that will display the last_name, salary and commission of all the employees who can earn a commission. Sort data in descending order of salary and commission.

	Employee Surname	Salary	Commission %
1	Russell	14000.00	0.40
2	Partners	13500.00	0.30
3	Erazuriz	12000.00	0.30
4	Ozer	11500.00	0.25
5	Abel	11000.00	0.30

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35 rows returned

12. Write a query that displays the employee number, surname, salary and department number for all the employees whose manager number is 101, 103 or 107. Make sure to order the results using the highest manager number at the very top.

	employee_id	last_name	salary	department_id
1	107	Lorentz	4200.00	60
2	106	Pataballa	4800.00	60
3	105	Austin	4800.00	60
4	104	Ernst	6000.00	60
5	205	Higgins	12000.00	110
...				

9 rows returned

13. Write a query that will uniquely list all the jobs which end with the word 'CLERK' in the employees table. Make sure that no repeated job should be included.

	Clerk Jobs
1	PU_CLERK
2	SH_CLERK
3	ST_CLERK

3 rows returned

14. Write a query that will display all the employees whose third letter is an 'a'

	Surname	Name
1	Grant	Douglas
2	Grant	Kimberely
3	Whalen	Jennifer

3 rows returned

15. Write a query that will display the surname and name of all those employees whose surname includes both an 'a' and an 'e'. Make sure to sort the obtained result using the smallest surname first.

	Surname	Name
1	Abel	Ellen
2	Ande	Sundar
3	Baer	Hermann
4	Bates	Elizabeth

20 rows returned

16. Write a query that displays name of all the employees whose start with either 'L' or 'D' and the second letter is an 'e'.

	first_name
1	Lex
2	Den

2 rows returned

17. Write a query that will display one single column for each employee whose job id ends with either 't' or 'r'. You are to sort the answer using the job id. The data in the output column should follow the below format and should be renamed INFO:

surname 'works as' job_id

	INFO
1	Gietz works as AC_ACCOUNT
2	Higgins works as AC_MGR
3	Whalen works as AD_ASST
4	Faviet works as FI_ACCOUNT
5	Chen works as FI_ACCOUNT

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9 rows returned

18. Write a query that will display the surname, job_id and salary for all those employees whose job_id starts with 'ST' and whose salary is not equal to 2500, 3500 or 7000.

	last_name	job_id	salary
1	Weiss	ST_MAN	8000.00
2	Fripp	ST_MAN	8200.00
3	Kaufling	ST_MAN	7900.00
4	Vollman	ST_MAN	6500.00
5	Mourgos	ST_MAN	5800.00
6	Nayer	ST_CLERK	3200.00

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21 rows returned

19. Write a query that will return all the telephone numbers which have the following characteristics

- The first number is either a 5 or a 6
- The second number is either a 0 or a 1
- The last number is wither a 4, 5 or a 6

	phone_number
1	603.123.6666
2	515.127.4566
3	515.127.4565
4	515.127.4564
5	515.123.5555
6	515.123.4444

6 rows returned

20. Write a query that will display all employees which are made up of four letters but do not finish with the letter n.

	first_name
1	Amit
2	Adam
3	Jack
4	Lisa
5	Luis

5 rows returned

21. Write a query that will display the last name, salary, and commission for all employees whose commission is 20%. The answer should be sorted using the surname in descending order.

	last_name	salary	commission_pct
1	Zlotkey	10500.00	0.20
2	Taylor	8600.00	0.20
3	Olsen	8000.00	0.20
4	Livingston	8400.00	0.20

7 rows returned