

Practice Tasks DBMS

Tasks	Expected Output																								
Task: write a query that print all employees and their job IDs, Display the last name concatenated with the job ID (separated by a comma and space) and name of the column Employee and Title	<table><tr><th colspan="3">Employee and Title</th></tr><tr><td>King, AD_PRES</td><td></td><td></td></tr><tr><td>Kochhar, AD_VP</td><td></td><td></td></tr><tr><td>De Haan, AD_VP</td><td></td><td></td></tr><tr><td>Hunold, IT_PROG</td><td></td><td></td></tr></table>			Employee and Title			King, AD_PRES			Kochhar, AD_VP			De Haan, AD_VP			Hunold, IT_PROG									
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Due to budget issues, the HR department needs a report that displays the last name and salary of employees who earn more than \$12,000.	<table><tr><th>LAST_NAME</th><th>SALARY</th></tr><tr><td>King</td><td>24000</td></tr><tr><td>Kochhar</td><td>17000</td></tr><tr><td>De Haan</td><td>17000</td></tr><tr><td>Hartstein</td><td>13000</td></tr></table>			LAST_NAME	SALARY	King	24000	Kochhar	17000	De Haan	17000	Hartstein	13000												
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Display the last name and salary for any employee whose salary is not in the range of \$5,000 to \$12,000.	<table><tr><th>LAST_NAME</th><th>SALARY</th></tr><tr><td>King</td><td>24000</td></tr><tr><td>Kochhar</td><td>17000</td></tr><tr><td>De Haan</td><td>17000</td></tr><tr><td>Lorentz</td><td>4200</td></tr><tr><td>Rajs</td><td>3500</td></tr><tr><td>Davies</td><td>3100</td></tr><tr><td>Matos</td><td>2600</td></tr><tr><td>Vargas</td><td>2500</td></tr><tr><td>Whalen</td><td>4400</td></tr><tr><td>Hartstein</td><td>13000</td></tr></table>			LAST_NAME	SALARY	King	24000	Kochhar	17000	De Haan	17000	Lorentz	4200	Rajs	3500	Davies	3100	Matos	2600	Vargas	2500	Whalen	4400	Hartstein	13000
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The HR department needs a report that displays the last name and hire date for all employees who were hired in 1994	<table><tr><th>LAST_NAME</th><th>HIRE_DATE</th></tr><tr><td>Higgins</td><td>07-JUN-94</td></tr><tr><td>Gietz</td><td>07-JUN-94</td></tr></table>			LAST_NAME	HIRE_DATE	Higgins	07-JUN-94	Gietz	07-JUN-94																
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Create a report to display the ast name, salary, and commission of all employees who earn commissions. Sort data in descending order of salary and commissions.	<table><tr><th>LAST_NAME</th><th>SALARY</th><th>COMMISSION_PCT</th></tr><tr><td>Abel</td><td>11000</td><td>.3</td></tr><tr><td>Zlotkey</td><td>10500</td><td>.2</td></tr><tr><td>Taylor</td><td>8600</td><td>.2</td></tr><tr><td>Grant</td><td>7000</td><td>.15</td></tr></table>			LAST_NAME	SALARY	COMMISSION_PCT	Abel	11000	.3	Zlotkey	10500	.2	Taylor	8600	.2	Grant	7000	.15							
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Display all employee last names in which the third letter of the name is a.	<table><tr><th>LAST_NAME</th></tr><tr><td>Grant</td></tr><tr><td>Whalen</td></tr></table>			LAST_NAME	Grant	Whalen																			
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Display the last name of all employees who have both an 'a' and an 'e' in their last name.	<table><tr><th></th></tr><tr><td>Davies</td></tr><tr><td>De Haan</td></tr><tr><td>Hartstein</td></tr><tr><td>Whalen</td></tr></table>		Davies	De Haan	Hartstein	Whalen	7											
Davies																		
De Haan																		
Hartstein																		
Whalen																		
Display the last name, job, and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to \$2,500, \$3,500, or \$7,000	<table><tr><th>LAST_NAME</th><th>JOB_ID</th><th>SALARY</th></tr><tr><td>Abel</td><td>SA_REP</td><td>11000</td></tr><tr><td>Taylor</td><td>SA_REP</td><td>8600</td></tr><tr><td>Davies</td><td>ST_CLERK</td><td>3100</td></tr><tr><td>Matos</td><td>ST_CLERK</td><td>2600</td></tr></table>	LAST_NAME	JOB_ID	SALARY	Abel	SA_REP	11000	Taylor	SA_REP	8600	Davies	ST_CLERK	3100	Matos	ST_CLERK	2600	8	
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The HR department needs a report to display the employee number, last name, salary, and salary increased by 15.5% (expressed as a whole number) for each employee.	<table><tr><th>EMPLOYEE_ID</th><th>LAST_NAME</th><th>SALARY</th><th>New Salary</th></tr><tr><td>100</td><td>King</td><td>24000</td><td>27720</td></tr><tr><td>101</td><td>Kochhar</td><td>17000</td><td>19635</td></tr><tr><td>...</td><td></td><td></td><td></td></tr></table>	EMPLOYEE_ID	LAST_NAME	SALARY	New Salary	100	King	24000	27720	101	Kochhar	17000	19635	...				9
EMPLOYEE_ID	LAST_NAME	SALARY	New Salary															
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...																		
Write a query that displays the last name (with the first letter uppercase and all other letters lowercase) and the length of the last name for all employees whose name starts with the letters J, A, or M. Give each column an appropriate label. Sort the results by the employees' last names	<table><tr><th>Name</th><th>Length</th></tr><tr><td>Abel</td><td>4</td></tr><tr><td>Matos</td><td>5</td></tr><tr><td>Mourgos</td><td>7</td></tr></table>	Name	Length	Abel	4	Matos	5	Mourgos	7	10								
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Mourgos	7																	
The HR department wants to find the length of employment for each employee. For each employee, display the last name and calculate the number of months between today and the date on which the employee was hired. Label the column MONTHS_WORKED. Order your results by the number of months employed. Round the number of months up to the lowest whole number.	<table><tr><th>LAST_NAME</th><th>MONTHS_WORKED</th></tr><tr><td>Zlotkey</td><td>47</td></tr><tr><td>Mourgos</td><td>50</td></tr><tr><td>Grant</td><td>55</td></tr><tr><td>Lorentz</td><td>59</td></tr><tr><td>Varaas</td><td>66</td></tr></table> <p>Your Result May Differ</p>	LAST_NAME	MONTHS_WORKED	Zlotkey	47	Mourgos	50	Grant	55	Lorentz	59	Varaas	66	11				
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Create a report that produces the following for each employee: <employee last name> earns <salary> monthly but wants <3 times salary>. Label the column Dream Salaries.	<table><tr><th colspan="2">Dream Salaries</th></tr><tr><td>King</td><td>earns \$24,000.00 monthly but wants \$72,000.00.</td></tr><tr><td>Kochhar</td><td>earns \$17,000.00 monthly but wants \$51,000.00.</td></tr><tr><td>De Haan</td><td>earns \$17,000.00 monthly but wants \$51,000.00.</td></tr><tr><td colspan="2">...</td></tr></table>	Dream Salaries		King	earns \$24,000.00 monthly but wants \$72,000.00.	Kochhar	earns \$17,000.00 monthly but wants \$51,000.00.	De Haan	earns \$17,000.00 monthly but wants \$51,000.00.	...		12					
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Create a query to display the last name and salary for all employees. Format the salary to be 15 characters long, left-padded with the \$ symbol. Label the column SALARY	<table><tr><th>LAST_NAME</th><th>SALARY</th></tr><tr><td>King</td><td>\$\$\$\$\$\$\$\$\$24000</td></tr><tr><td>Kochhar</td><td>\$\$\$\$\$\$\$\$\$17000</td></tr><tr><td>De Haan</td><td>\$\$\$\$\$\$\$\$\$17000</td></tr><tr><td>Hunold</td><td>\$\$\$\$\$\$\$\$\$9000</td></tr><tr><td colspan="2">...</td></tr></table>	LAST_NAME	SALARY	King	\$\$\$\$\$\$\$\$\$24000	Kochhar	\$\$\$\$\$\$\$\$\$17000	De Haan	\$\$\$\$\$\$\$\$\$17000	Hunold	\$\$\$\$\$\$\$\$\$9000	...		13			
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...																	
Display each employee’s last name, hire date, and salary review date, which is the first Monday after six months of service. Label the column REVIEW. Format the dates to appear in the format similar to “Monday, the Thirty-First of July, 2000.”	<table><tr><th>LAST_NAME</th><th>HIRE_DATE</th><th>REVIEW</th></tr><tr><td>King</td><td>17-JUN-87</td><td>Monday, the Twenty-First of December, 1987</td></tr><tr><td>Kochhar</td><td>21-SEP-89</td><td>Monday, the Twenty-Sixth of March, 1990</td></tr><tr><td>De Haan</td><td>13-JAN-93</td><td>Monday, the Nineteenth of July, 1993</td></tr><tr><td>Hunold</td><td>03-JAN-90</td><td>Monday, the Ninth of July, 1990</td></tr></table>	LAST_NAME	HIRE_DATE	REVIEW	King	17-JUN-87	Monday, the Twenty-First of December, 1987	Kochhar	21-SEP-89	Monday, the Twenty-Sixth of March, 1990	De Haan	13-JAN-93	Monday, the Nineteenth of July, 1993	Hunold	03-JAN-90	Monday, the Ninth of July, 1990	14
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Display the last name, hire date, and day of the week on which the employee started. Label the column DAY. Order the results by the day of the week, starting with Monday.	<table><tr><th>LAST_NAME</th><th>HIRE_DATE</th><th>DAY</th></tr><tr><td>Grant</td><td>24-MAY-99</td><td>MONDAY</td></tr><tr><td>Ernst</td><td>21-MAY-91</td><td>TUESDAY</td></tr><tr><td>Mourgos</td><td>16-NOV-99</td><td>TUESDAY</td></tr></table>	LAST_NAME	HIRE_DATE	DAY	Grant	24-MAY-99	MONDAY	Ernst	21-MAY-91	TUESDAY	Mourgos	16-NOV-99	TUESDAY	15			
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Grant	24-MAY-99	MONDAY															
Ernst	21-MAY-91	TUESDAY															
Mourgos	16-NOV-99	TUESDAY															
Create a query that displays the employees’ last names and commission amounts. If an employee does not earn commission, show “No Commission.” Label the column COMM	<table><tr><th>LAST_NAME</th><th>COMM</th></tr><tr><td>King</td><td>No Commission</td></tr><tr><td>Kochhar</td><td>No Commission</td></tr></table>	LAST_NAME	COMM	King	No Commission	Kochhar	No Commission	16									
LAST_NAME	COMM																
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Create a query that displays the first eight characters of the employees’ last names and indicates the amounts of their salaries with asterisks. Each asterisk signifies a thousand dollars. Sort the data in	<table><tr><th colspan="2">EMPLOYEES_AND_THEIR_SALARIES</th></tr><tr><td>King</td><td>*****</td></tr><tr><td>Kochhar</td><td>*****</td></tr><tr><td>De Haan</td><td>*****</td></tr></table>	EMPLOYEES_AND_THEIR_SALARIES		King	*****	Kochhar	*****	De Haan	*****	17							
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descending order of salary. Label it
EMPLOYEES_AND_THEIR_SALARIES

Using the DECODE function, write
a query that displays the grade of
all employees based on the value
of the column JOB_ID, using the
following data:

Job Grades:

For AD_PRES Print A

For ST_MAN Print B

For IT_PROG Print C

For SA_REP Print D

For ST_CLERK Print E

For None of the above Print 0

JOB_ID	GRA
AC_ACCOUNT	0
AC_MGR	0
AD_ASST	0
AD_PRES	A
AD_VP	0

18

**Rewrite above with case
statement.**

19

Find the highest, lowest, sum,
and average salary of all
employees. Label the columns
Maximum, Minimum, Sum, and
Average, respectively

Maximum	Minimum	Sum	Average
24000	2500	175500	8775

20

Find the highest, lowest, sum,
and average salary for each job.
Label the columns Maximum,
Minimum, Sum, and Average

JOB_ID	Maximum	Minimum	Sum	Average
AC_ACCOUNT	8300	8300	8300	8300
AC_MGR	12000	12000	12000	12000
AD_ASST	4400	4400	4400	4400
AD_PRES	24000	24000	24000	24000

21

Write a query to display the
number of people with the
same job

JOB_ID	COUNT(*)
AC_ACCOUNT	1
AC_MGR	1
AD_ASST	1
AD_PRES	1
AD_VP	2

22

Create a query to display the
total number of employees and,
of that total, the number of
employees hired in 1995, 1996,
1997, and 1998. Create
appropriate column headings.

TOTAL	1995	1996	1997	1998
20	1	2	2	3

23

Create a report to display the
manager number and the salary
of the lowest-paid employee for

MANAGER_ID	MIN(SALARY)
102	9000
205	8300
149	7000

24

that manager. Exclude anyone whose manager is not known. Exclude any groups where the minimum salary is \$6,000 or less. Sort the output in descending order of salary.

Write a query for the HR department to produce the addresses of all the departments. Use the LOCATIONS and COUNTRIES tables. Show the location ID, street address, city, state or province, and country in the output. Use a JOIN to produce the results.

LOCATION_ID	STREET_ADDRESS	CITY	STATE_PROVINCE	COUNTRY_NAME
1400	2014 Jabberwocky Rd	Southlake	Texas	United States of America
1500	2011 Interiors Blvd	South San Francisco	California	United States of America

The HR department needs a report of all employees. Write a query to display the last name, department number, and department name for all employees.

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Whalen	10	Administration
Hartstein	20	Marketing
Fay	20	Marketing

The HR department needs a report of employees in Toronto. Display the last name, job, department number, and department name for all employees who work in Toronto.

LAST_NAME	JOB_ID	DEPARTMENT_ID	DEPARTMENT_NAME
Hartstein	MK_MAN	20	Marketing
Fay	MK_REP	20	Marketing

Create a report to display employees' last name and employee number along with their manager's last name and manager number

Employee	EMP#	Manager	M#
Kochhar	101	King	
De Haan	102	King	

Modify above query that also display employee (king) who has no manager

The HR department needs a report on job grades and salaries. Report will look like this

LAST_NAME	JOB_ID	DEPARTMENT_NAME	SALARY	GRA
Matos	ST_CLERK	Shipping	2600	A
Vargas	ST_CLERK	Shipping	2500	A