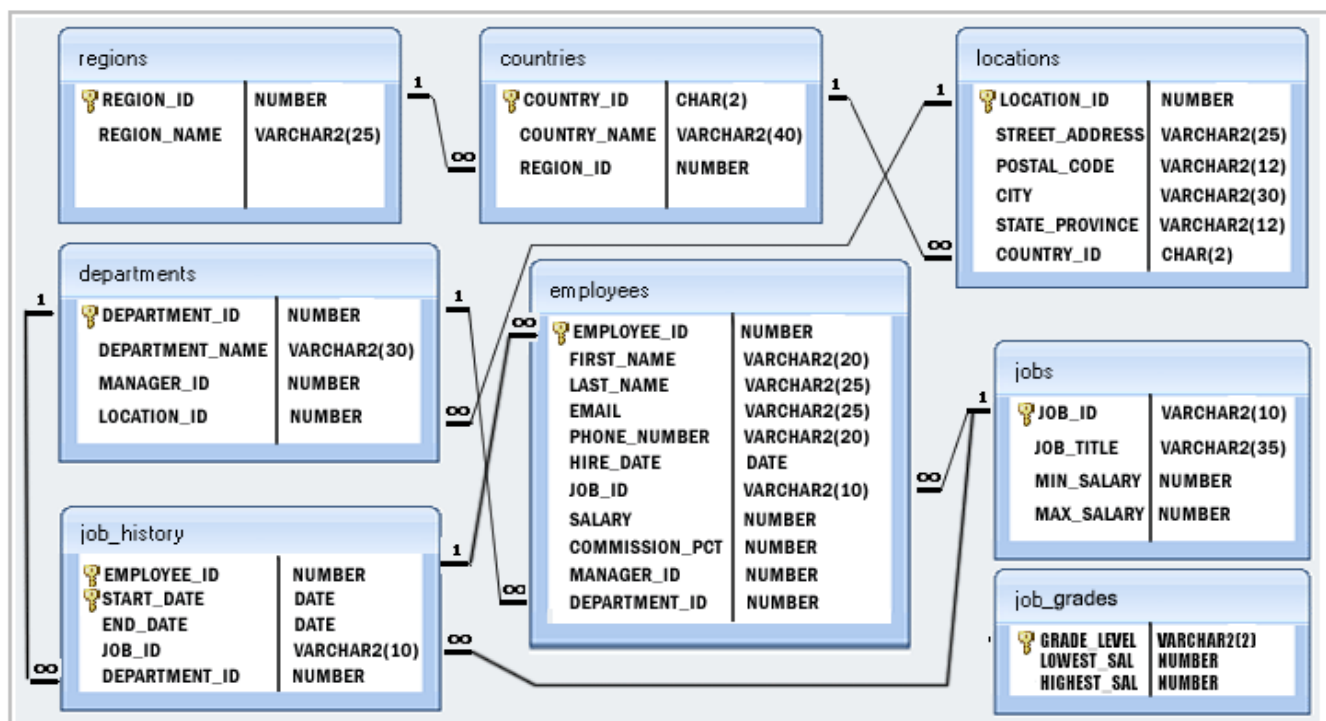


CASE STUDY SOLUTION

(SESSION ONE)

Structure of HR database :



QUERY 1:

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OUTPUT:

department_id
90
60
100
30
50
80
0
10
20
40
70
110

QUERY 2:

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```
1 /* Write a query to get all employee details from the employee table order by first name,
2 descending.*/
3 SELECT *
4 FROM employees
5 ORDER BY first_name DESC;
6
```

OUTPUT:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_...	manager_id	department_id	Avg_Salary
180	Winston	Taylor	WTAYLOR	650.507.9876	1987-09-05	SH_CLERK	3200	0	120	50	NULL
171	William	Smith	WSMITH	011.44.1343.62...	1987-08-27	SA_REP	7400	0.15	148	80	NULL
206	William	Gietz	WGIEZT	515.123.8181	1987-10-01	AC_ACCOUNT	8300	1	205	110	NULL
195	Vance	Jones	VJONES	650.501.4876	1987-09-20	SH_CLERK	2800	0	123	50	NULL
106	Valli	Pataballa	VPATABAL	590.423.4560	1987-06-23	IT_PROG	4800	0	103	60	NULL
141	Trenna	Rajs	TRAJS	650.121.8009	1987-07-28	ST_CLERK	3500	0	124	50	NULL
190	Timothy	Gates	TGATES	650.505.3876	1987-09-15	SH_CLERK	2900	0	122	50	NULL
170	Taylor	Fox	TFOX	011.44.1343.72...	1987-08-26	SA_REP	9600	0.2	148	80	NULL
132	TJ	Olson	TJOLSON	650.124.8234	1987-07-19	ST_CLERK	2100	0	121	50	NULL
203	Susan	Mavris	SMAVRIS	515.123.7777	1987-09-28	HR_REP	6500	0	101	40	NULL
173	Sundita	Kumar	SKUMAR	011.44.1343.32...	1987-08-29	SA_REP	6100	0.1	148	80	NULL
166	Sundar	Ande	SANDE	011.44.1346.62...	1987-08-22	SA_REP	6400	0.1	147	80	NULL
100	Steven	King	SKING	515.123.4567	1987-06-17	AD_PRES	24000	0	0	90	NULL
128	Steven	Markle	SMARKLE	650.124.1434	1987-07-15	ST_CLERK	2200	0	120	50	NULL
138	Stephen	Stiles	SSTILES	650.121.2034	1987-07-25	ST_CLERK	3200	0	123	50	NULL
117	Sigal	Tobias	STOBIAS	515.127.4564	1987-07-04	PU_CLERK	2800	0	114	30	NULL
116	Shelli	Baida	SBAIDA	515.127.4563	1987-07-03	PU_CLERK	2900	0	114	30	NULL
205	Shelley	Higgins	SHIGGINS	515.123.8080	1987-09-30	AC_MGR	12000	1	101	110	NULL

QUERY 3:

12345678910111.12

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```
1 /* Write a query to find the names (first_name, last name should be displayed in 1 column),
2 department ID and the name of all the employees.
3 */
4 SELECT department_id, first_name || ' ' || last_name AS FULL_Name
5 FROM employees|
```

OUTPUT:

department_id	FULL_Name
90	Steven King
90	Neena Kochhar
90	Lex De Haan
60	Alexander Hunold
60	Bruce Ernst
60	David Austin
60	Valli Pataballa
60	Diana Lorentz
100	Nancy Greenberg
100	Daniel Faviet
100	John Chen
100	Ismael Sciarra
100	Jose Manuel Urman

QUERY 4:

1234567891011

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```
1 /* Write a query to get the names (first_name, last_name), salary, PF of all the employees (PF
2 is calculated as 12% of salary). */
3
4 SELECT first_name, last_name, salary, salary * 0.12 PF
5 FROM employees;
```

OUTPUT:

first_name	last_name	salary	PF
Steven	King	24000	2880
Neena	Kochhar	17000	2040
Lex	De Haan	17000	2040
Alexander	Hunold	9000	1080
Bruce	Ernst	6000	720
David	Austin	4800	576
Valli	Pataballa	4800	576
Diana	Lorentz	4200	504
Nancy	Greenberg	12000	1440
Daniel	Faviet	9000	1080

QUERY 5:

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```
1 /* Write a query to display the job history that was done by any employee who is currently
2 drawing more than 10000 of salary */
3 SELECT *
4 FROM job_history
5 INNER JOIN employees
6 ON job_history.employee_id = employees.employee_id
7 WHERE salary > 10000;
```

OUTPUT:

i	employee_id	start_date	end_d...	job_id	depar...	emplo...	first_...	last_n...	email	phon...	hire_...	job_id	salary	comm...	mana...	depar...	Avg_...
102		1993-01-13	1998-0...	IT_PR...	60	102	Lex	De Haan	LDEHA...	515.12...	1987-0...	AD_VP	17000	0	100	90	NULL
101		1989-09-21	1993-1...	AC_AC...	110	101	Neena	Kochhar	NKOC...	515.12...	1987-0...	AD_VP	17000	0	100	90	NULL
101		1993-10-28	1997-0...	AC_MGR	110	101	Neena	Kochhar	NKOC...	515.12...	1987-0...	AD_VP	17000	0	100	90	NULL
201		1996-02-17	1999-1...	MK_REP	20	201	Michael	Hartstein	MHAR...	515.12...	1987-0...	MK_MAN	13000	0	100	20	NULL
114		1998-03-24	1999-1...	ST_CL...	50	114	Den	Raphaely	DRAP...	515.12...	1987-0...	PU_MAN	11000	0	100	30	NULL

QUERY 6:

1	2	3	4	5	6	7	8	9	10	11	1.12	
---	---	---	---	---	---	---	---	---	----	----	------	--

```
1 -- Write a query to get the number of jobs available in the employees table
2 SELECT COUNT(DISTINCT job_id) number_of_jobs
3 FROM employees;
```

OUTPUT:

number_of_jobs
19

QUERY 7:

```
1 /* Write a query to get monthly salary of each and every employee? Bonus: (If you can round 2
2 decimal places)
3 */
4 SELECT * , round(salary / 12, 2) monthly_salary
5 FROM employees;
```

OUTPUT:

i	empl...	first_na...	last_na...	email	phone_...	hire_date	job_id	salary	commi...	manag...	depart...	Avg_Sa...	monthly_salary
100		Steven	King	SKING	515.123...	1987-06-17	AD_PRES	24000	0	0	90	NULL	2000
101		Neena	Kochhar	NKOCH...	515.123...	1987-06-18	AD_VP	17000	0	100	90	NULL	1416
102		Lex	De Haan	LDEHAAN	515.123...	1987-06-19	AD_VP	17000	0	100	90	NULL	1416
103		Alexander	Hunold	AHUNOLD	590.423...	1987-06-20	IT_PROG	9000	0	102	60	NULL	750
104		Bruce	Ernst	BERNST	590.423...	1987-06-21	IT_PROG	6000	0	103	60	NULL	500
105		David	Austin	DAUSTIN	590.423...	1987-06-22	IT_PROG	4800	0	103	60	NULL	400
106		Valli	Pataballa	VPATABAL	590.423...	1987-06-23	IT_PROG	4800	0	103	60	NULL	400
107		Diana	Lorentz	DLORE...	590.423...	1987-06-24	IT_PROG	4200	0	103	60	NULL	350
108		Nancy	Greenberg	NGREE...	515.124...	1987-06-25	FI_MGR	12000	0	101	100	NULL	1000
109		Daniel	Faviet	DFAVIET	515.124...	1987-06-26	FI_ACC...	9000	0	108	100	NULL	750
110		John	Chen	JCHEN	515.124...	1987-06-27	FI_ACC...	8200	0	108	100	NULL	683
111		Ismael	Sciarra	ISCIARRA	515.124...	1987-06-28	FI_ACC...	7700	0	108	100	NULL	641
112		Jose Ma...	Urman	JMURMAN	515.124...	1987-06-29	FI_ACC...	7800	0	108	100	NULL	650

QUERY 8:

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```
1 /* Write a query to display the names (first_name, last_name) and salary for all employees
2 whose salary is not in the range $10,000 through $15,000 and are in department 30 or 100.
3 */
4 SELECT first_name, last_name, salary
5 FROM employees
6 WHERE salary NOT BETWEEN 10000 AND 15000 AND (department_id BETWEEN 30 AND 100);
7
```

OUTPUT:

first_name	last_name	salary
Timothy	Gates	2900
Randall	Perkins	2500
Sarah	Bell	4000
Britney	Everett	3900
Samuel	McCain	3200
Vance	Jones	2800
Alana	Walsh	3100
Kevin	Feeney	3000
Donald	OConnell	2600
Douglas	Grant	2600

QUERY 9:

```
1 /* Write a query to display the first_name of all employees who have both an "b" and "c" in their
2 first name.
3 */
4 SELECT *
5 FROM employees
6 WHERE first_name LIKE '%[bc]%'
```

OUTPUT:

IT'S EMPTY

QUERY 9. 1:

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```
1 /* Write a query to display the first_name of all employees who have both an "b" and "c" in their
2 first name.
3 */
4 SELECT *
5 FROM employees
6 WHERE first_name LIKE '%c%' AND first_name LIKE '%b%';
```

OUTPUT:

[illegible]

QUERY 10:

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```
1 /* Write a query to find the names (first_name, last_name) and salaries of the employees who
2 have a higher salary than the employee whose last_name='Bull'
3 */
4
5 SELECT first_name, last_name, salary
6 FROM employees
7 WHERE salary > ( SELECT salary FROM employees WHERE last_name LIKE 'Bull')
```

OUTPUT:

first_name	last_name	salary
Steven	King	24000
Neena	Kochhar	17000
Lex	De Haan	17000
Alexander	Hunold	9000
Bruce	Ernst	6000
David	Austin	4800
Valli	Pataballa	4800
Diana	Lorentz	4200
Nancy	Greenberg	12000
Daniel	Faviet	9000
John	Chen	8200
Ismael	Sciarra	7700
Jose Manuel	Urman	7800

QUERY 11:

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```
1 /* Write a query to find the names (first_name, last_name) of the employees who are
2 managers*/
3
4 SELECT first_name, last_name
5 FROM employees
6 WHERE (employee_id IN (SELECT manager_id FROM employees));
```

OUTPUT:

first_name	last_name
Steven	King
Neena	Kochhar
Lex	De Haan
Alexander	Hunold
Nancy	Greenberg
Den	Raphaely
Matthew	Weiss
Adam	Fripp
Payam	Kaufling
Shanta	Vollman