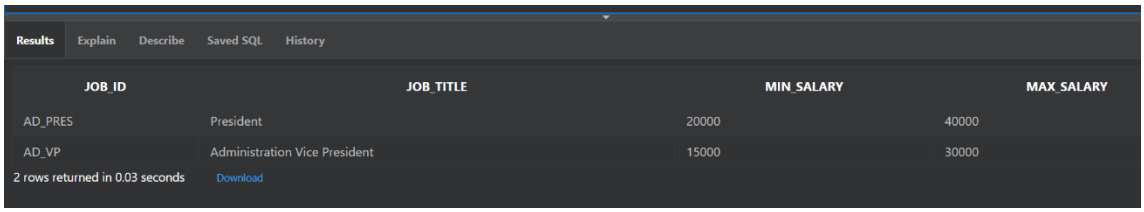
Database Assignment # 1 Muhammad Mujtaba Afzal 14882

1.select * from jobs where min_salary>10000

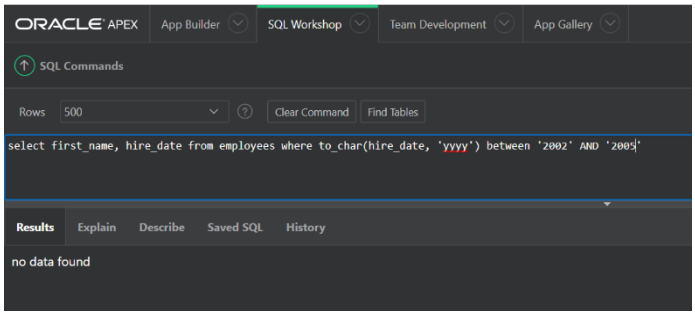


Results | Explain | Describe | Saved SQL | History

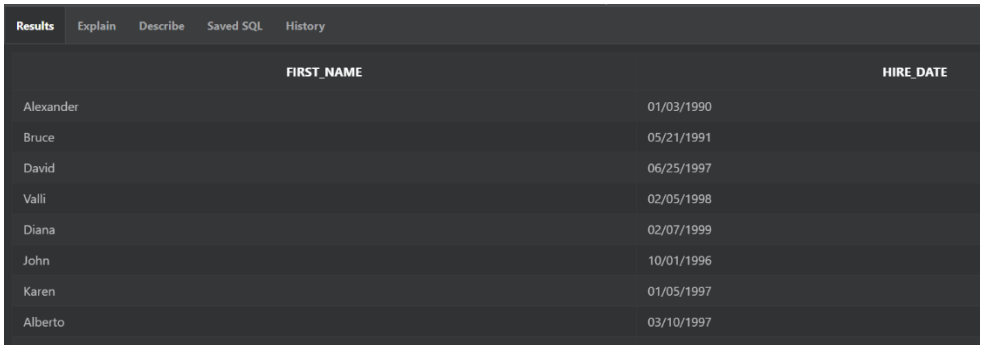
JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY
AD_PRES	President	20000	40000
AD_VP	Administration Vice President	15000	30000

2 rows returned in 0.03 seconds Download

2.select first_name, hire_date from employees where to_char(hire_date, 'yyyy') between '2002' AND '2005'



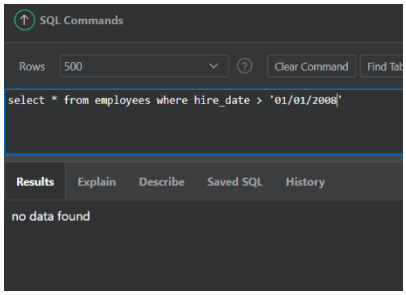
3.select first_name, hire_date from employees where job_id='IT_PROG' OR job_id='SA_MAN'



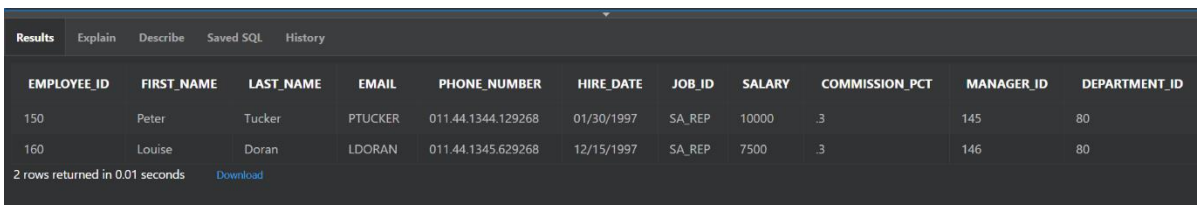
Results | Explain | Describe | Saved SQL | History

FIRST_NAME	HIRE_DATE
Alexander	01/03/1990
Bruce	05/21/1991
David	06/25/1997
Valli	02/05/1998
Diana	02/07/1999
John	10/01/1996
Karen	01/05/1997
Alberto	03/10/1997

4.select * from employees where hire_date > '01/01/2008'



5.select * from employees where employee_id in ('150','160')



Results | Explain | Describe | Saved SQL | History

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
150	Peter	Tucker	PTUCKER	011.44.1344.129268	01/30/1997	SA_REP	10000	.3	145	80
160	Louise	Doran	LDORAN	011.44.1345.629268	12/15/1997	SA_REP	7500	.3	146	80

2 rows returned in 0.01 seconds Download

6.select first_name, salary, commission_pct, hire_date from employyes where salary<10000

Results | Explain | Describe | Saved SQL | History

FIRST_NAME	SALARY	COMMISSION_PCT	HIRE_DATE
Alexander	9000	-	01/03/1990
Bruce	6000	-	05/21/1991
David	4800	-	06/25/1997
Valli	4800	-	02/05/1998
Diana	4200	-	02/07/1999
Daniel	9000	-	08/16/1994
John	8200	-	09/28/1997
Ismael	7700	-	09/30/1997

7.select first_name, round(salary,-3) from employees

Results | Explain | Describe | Saved SQL | History

FIRST_NAME	ROUND(SALARY,-3)
Steven	24000
Neena	17000
Lex	17000
Alexander	9000
Bruce	6000
David	5000
Valli	5000

8.select * from employees order by job_id desc

Results | Explain | Describe | Saved SQL | History

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
123	Shanta	Vollman	SVOLLMAN	650.123.4234	10/10/1997	ST_MAN	6500	-	100	50
122	Payam	Kaufling	PKAUFLIN	650.123.3234	05/01/1995	ST_MAN	7900	-	100	50
121	Adam	Fripp	AFRIPP	650.123.2234	04/10/1997	ST_MAN	8200	-	100	50
120	Matthew	Weiss	MWEISS	650.123.1234	07/18/1996	ST_MAN	8000	-	100	50

9.select * from employees where substr(first_name,1,1)='S' OR substr(last_name,1,1)='S'

Results | Explain | Describe | Saved SQL | History

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
100	Steven	King	SKING	515.123.4567	06/17/1987	AD_PRES	24000	-	-	90
111	Ismael	Sciarra	ISCIARRA	515.124.4369	09/30/1997	FI_ACCOUNT	7700	-	108	100
116	Shelli	Baida	SBAIDA	515.127.4563	12/24/1997	PU_CLERK	2900	-	114	30
117	Sigal	Tobias	STOBIAS	515.127.4564	07/24/1997	PU_CLERK	2800	-	114	30
123	Shanta	Vollman	SVOLLMAN	650.123.4234	10/10/1997	ST_MAN	6500	-	100	50
128	Steven	Markle	SMARKLE	650.124.1434	03/08/2000	ST_CLERK	2200	-	120	50
138	Stephen	Stiles	SSTILES	650.121.2034	10/26/1997	ST_CLERK	3200	-	123	50
139	John	Seo	JSEO	650.121.2019	02/12/1998	ST_CLERK	2700	-	123	50

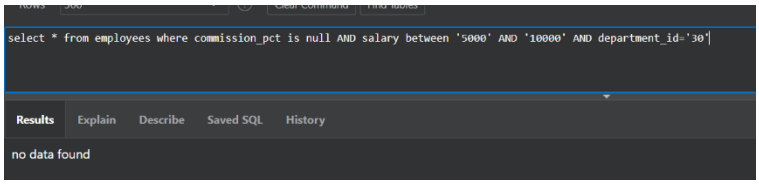
10.select * from employees where to_char(hire_date,'mm')=05

Results | Explain | Describe | Saved SQL | History

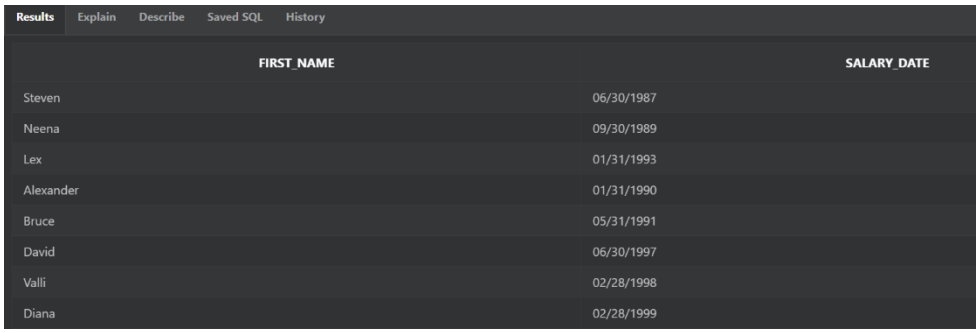
EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
104	Bruce	Ernst	BERNST	590.423.4568	05/21/1991	IT_PROG	6000	-	103	60
115	Alexander	Khoo	AKHOO	515.127.4562	05/18/1995	PU_CLERK	3100	-	114	30
122	Payam	Kaufling	PKAUFLIN	650.123.3234	05/01/1995	ST_MAN	7900	-	100	50
174	Ellen	Abel	EABEL	011.44.1644.429267	05/11/1996	SA_REP	11000	.3	149	80
178	Kimberely	Grant	KGRANT	011.44.1644.429263	05/24/1999	SA_REP	7000	.15	149	-
197	Kevin	Feeney	KFEENEY	650.507.9822	05/23/1998	SH_CLERK	3000	-	124	50

6 rows returned in 0.01 seconds Download

11.select * from employees where commission_pct is null AND salary between '5000' AND '10000' AND department_id='30'

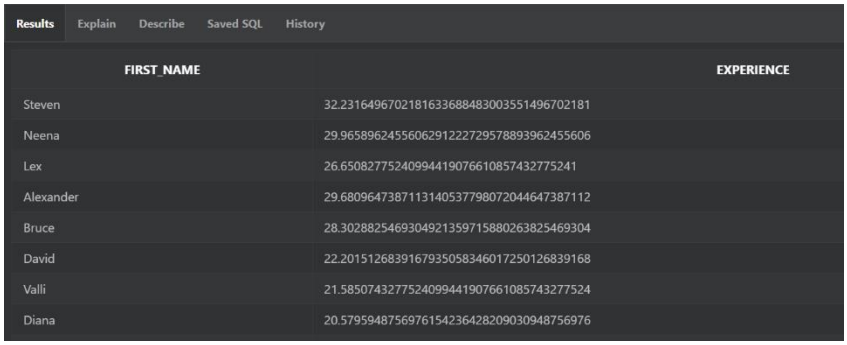


12.select first_name, LAST_DAY(hire_date) AS Salary_date from employees



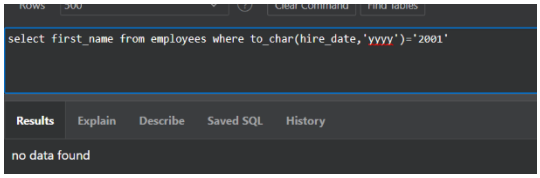
FIRST_NAME	SALARY_DATE
Steven	06/30/1987
Neena	09/30/1989
Lex	01/31/1993
Alexander	01/31/1990
Bruce	05/31/1991
David	06/30/1997
Valli	02/28/1998
Diana	02/28/1999

13.select first_name, (sysdate - hire_date)/365 AS Experience from employees

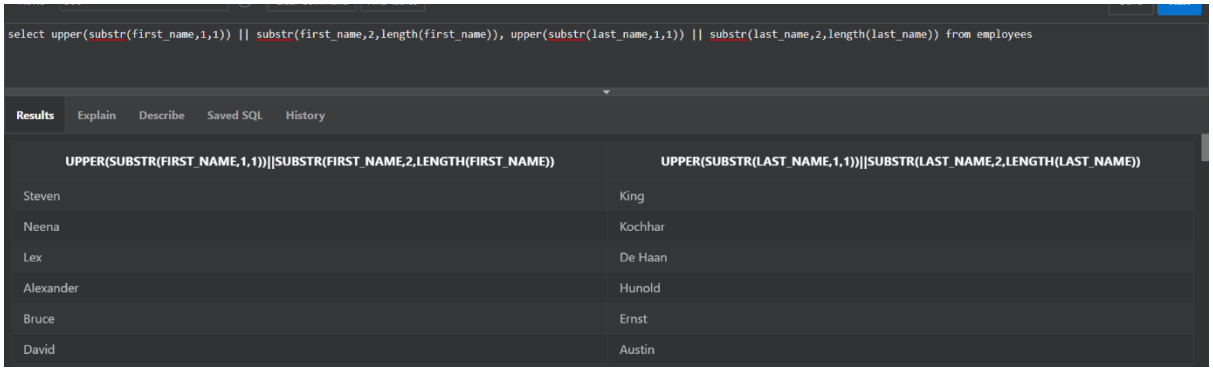


FIRST_NAME	EXPERIENCE
Steven	32.231649670218163368848300355149670218 1
Neena	29.965896245560629122272957889396245560 6
Lex	26.650827752409944190766108574327752 41
Alexander	29.680964738711314053779807204464738711 2
Bruce	28.302882546930492135971588026382546930 4
David	22.201512683916793505834601725012683916 8
Valli	21.585074327752409944190766108574327752 4
Diana	20.579594875697615423642820903094875697 6

14.select first_name from employees where to_char(hire_date,'yyyy')='2001'



15.select upper(substr(first_name,1,1)) || substr(first_name,2,length(first_name)), upper(substr(last_name,1,1)) || substr(last_name,2,length(last_name)) from employees



UPPER(SUBSTR(FIRST_NAME,1,1))||SUBSTR(FIRST_NAME,2,LENGTH(FIRST_NAME))	UPPER(SUBSTR(LAST_NAME,1,1))||SUBSTR(LAST_NAME,2,LENGTH(LAST_NAME))
Steven	King
Neena	Kochhar
Lex	De Haan
Alexander	Hunold
Bruce	Ernst
David	Austin

16.select first_name, last_name, length(first_name) from employees where instr(last_name, 'b')>3

```
select first_name, last_name, length(first_name) from employees where instr(last_name, 'b')>3
```

Results | Explain | Describe | Saved SQL | History

FIRST_NAME	LAST_NAME	LENGTH(FIRST_NAME)
Valli	Pataballa	5
Nancy	Greenberg	5
Gerald	Cambrault	6
Nanette	Cambrault	7

4 rows returned in 0.01 seconds

17.select upper(first_name), lower(email) from employees where lower(first_name) = lower(email)

Rows 500 | Clear Command | Find Tables

```
select upper(first_name), lower(email) from employees where lower(first_name) = lower(email)
```

Results | Explain | Describe | Saved SQL | History

no data found

18.select * from employees where to_char(hire_date,'yyyy')=2019

Rows 500 | Clear Command | Find Tables

```
select * from employees where to_char(hire_date,'yyyy')=2019
```

Results | Explain | Describe | Saved SQL | History

no data found

19.select sysdate - to_date('01/01/2011') from employees

SYSDATE-TO_DATE('01/01/2011')
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740
3165.585428240740740740740740740740

20.select to_char(hire_date, 'month') AS Month, count(hire_date) from employees where to_char(hire_date,'yyyy')=to_char(sysdate,'yyyy') group by to_char(hire_date,'month')

Rows 500 | Clear Command | Find Tables

```
select to_char(hire_date, 'month') AS Month, count(hire_date) from employees where to_char(hire_date,'yyyy')=to_char(sysdate,'yyyy') group by to_char(hire_date,'month')
```

Results | Explain | Describe | Saved SQL | History

no data found

21.select manager_id, count(employee_id) AS Number_of_Employees from employees group by manager_id

MANAGER_ID	NUMBER_OF_EMPLOYEES
108	5
124	8
121	8
145	6
-	1
103	4
101	5
120	8

22.select employee_id, max(end_date) from job_history group by employee_id

Results Explain Describe Saved SQL History

EMPLOYEE_ID	MAX(END_DATE)
101	03/15/1997
102	07/24/1998
114	12/31/1999
122	12/31/1999
176	12/31/1999
200	12/31/1998
201	12/19/1999

7 rows returned in 0.00 seconds Download

23.select to_char(hire_date, 'month') AS Month, count(employee_id) from employees where to_char(hire_date, 'dd')>'15' group by to_char(hire_date, 'month')

```
select to_char(hire_date, 'month') AS Month, count(employee_id) from employees where to_char(hire_date, 'dd')>'15' group by to_char(hire_date, 'month')
```

Results Explain Describe Saved SQL History

MONTH	COUNT(EMPLOYEE_ID)
july	3
february	6
april	4
may	4
june	5
august	6
december	2
september	5

24.select country_id, count(city) from locations group by country_id

COUNTRY_ID	COUNT(CITY)
CN	1
CH	2
NL	1
JP	2
SG	1
DE	1
MX	1
IT	2
US	4

25.select department_id, avg(salary) from employees where commission_pct is NOT null group by department_id

```
select department_id, avg(salary) from employees where commission_pct is NOT null group by department_id
```

Results | Explain | Describe | Saved SQL | History

DEPARTMENT_ID	AVG(SALARY)
-	7000
80	8955.882352941176470588235294117647058882

2 rows returned in 0.00 seconds Download

26.select job_id, count(employee_id), sum(salary), max(salary)-min(salary) from employees group by job_id

```
select job_id, count(employee_id), sum(salary), max(salary)-min(salary) from employees group by job_id
```

Results | Explain | Describe | Saved SQL | History

JOB_ID	COUNT(EMPLOYEE_ID)	SUM(SALARY)	MAX(SALARY)-MIN(SALARY)
AD_VP	2	34000	0
FI_ACCOUNT	5	39600	2100
PU_CLERK	5	13900	600
SH_CLERK	20	64300	1700
HR_REP	1	6500	0
PU_MAN	1	11000	0
AC_MGR	1	12000	0
ST_CLERK	20	55700	1500

27.select job_id from employees group by job_id having avg(salary)>10000

Results | Explain | Describe | Saved SQL | History

JOB_ID
AD_VP
PU_MAN
AC_MGR
SA_MAN
FI_MGR
AD_PRES
MK_MAN

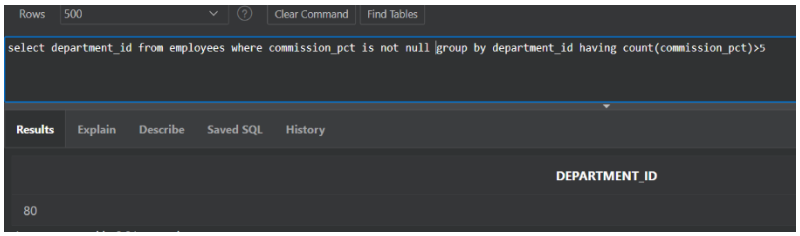
28.select to_char(hire_date,'yyyy') AS Year from employees group by to_char(hire_date,'yyyy') having count(employee_id)>10

```
select to_char(hire_date,'yyyy') AS Year from employees group by to_char(hire_date,'yyyy') having count(employee_id)>10
```

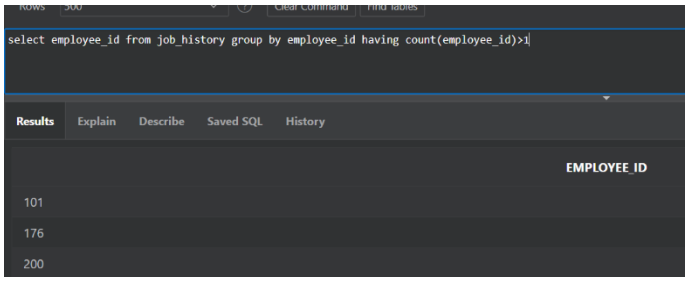
Results | Explain | Describe | Saved SQL | History

YEAR
1998
1997
2000
1999

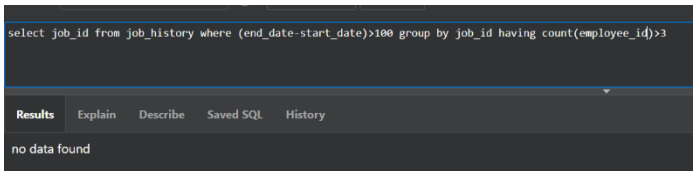
29.select department_id from employees where commission_pct is not null group by department_id having count(commission_pct)>5



30.select employee_id from job_history group by employee_id having count(employee_id)>1



31.select job_id from job_history where (end_date-start_date)>100 group by job_id having count(employee_id)>3



32.select to_char(hire_date, 'yyyy') AS Year, department_id, count(employee_id) from employees group by to_char(hire_date, 'yyyy'), department_id