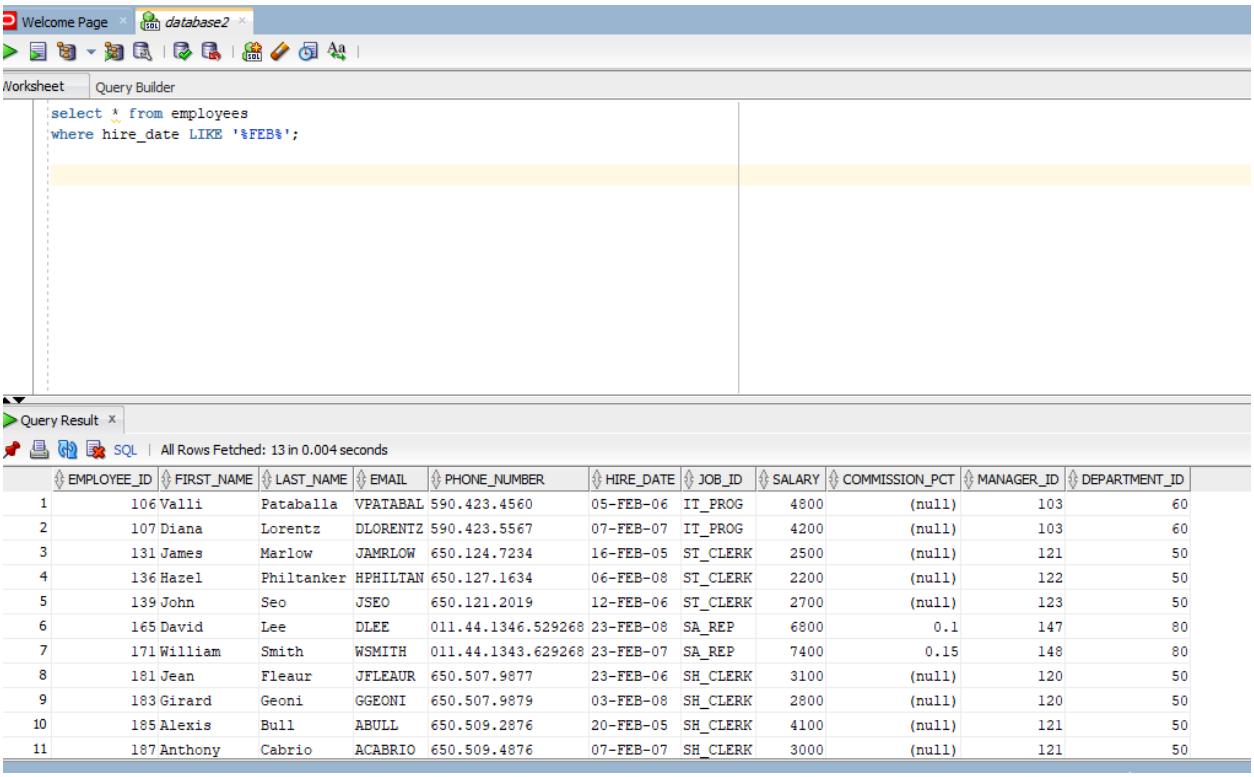
Database Lab Task

Submitted by: Sharifullah

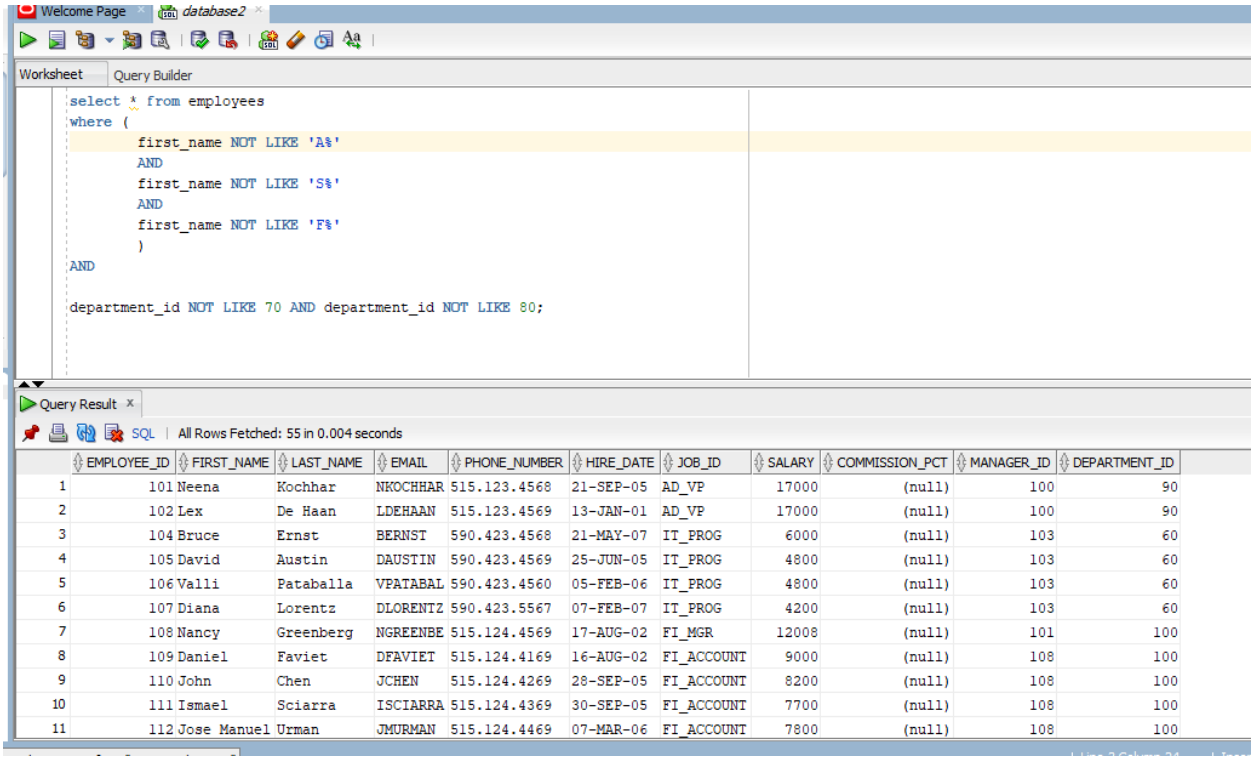
Submitted to: Basit Ali

1. Q1. Select record of all employees who have joined the company in the Month of Feburary.(any date,any year)



	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
2	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
3	131	James	Marlow	JAMRLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
4	136	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122	50
5	139	John	Seo	JSEO	650.121.2019	12-FEB-06	ST_CLERK	2700	(null)	123	50
6	165	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6800	0.1	147	80
7	171	William	Smith	WSMITH	011.44.1343.629268	23-FEB-07	SA_REP	7400	0.15	148	80
8	181	Jean	Fleaur	JFLEAUR	650.507.9877	23-FEB-06	SH_CLERK	3100	(null)	120	50
9	183	Girard	Geoni	GGEONI	650.507.9879	03-FEB-08	SH_CLERK	2800	(null)	120	50
10	185	Alexis	Bull	ABULL	650.509.2876	20-FEB-05	SH_CLERK	4100	(null)	121	50
11	187	Anthony	Cabrio	ACABRIO	650.509.4876	07-FEB-07	SH_CLERK	3000	(null)	121	50

2. Select all records of employees where the first letter of the First_name is NOT an "A" or a "S" or an "F" and department id is not 80 or 70.



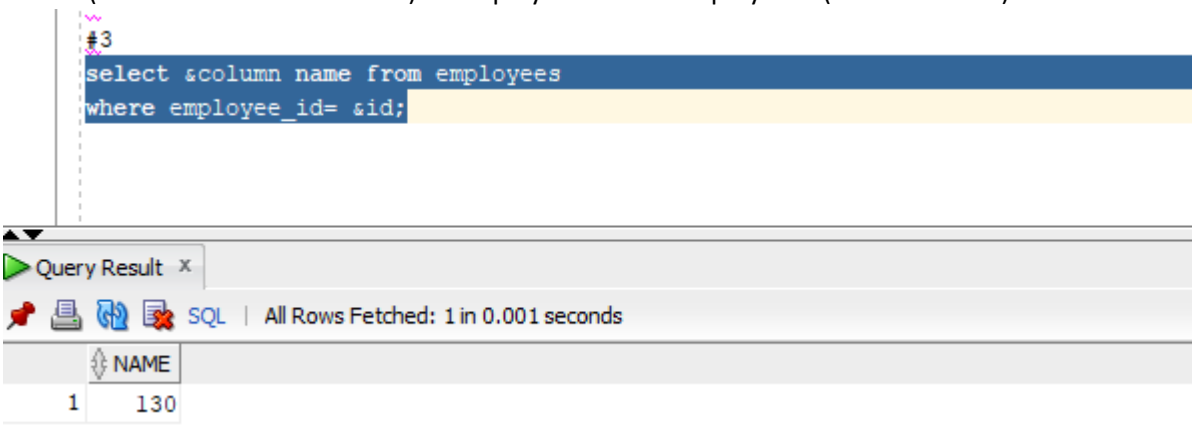
```
select * from employees
where (
        first_name NOT LIKE 'A%'
        AND
        first_name NOT LIKE 'S%'
        AND
        first_name NOT LIKE 'F%'
        )
AND

department_id NOT LIKE 70 AND department_id NOT LIKE 80;
```

Query Result — All Rows Fetched: 55 in 0.004 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
2	102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	90
3	104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103	60
4	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
5	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
6	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
7	108	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	100
8	109	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	100
9	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
10	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
11	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100

3. Select (Ask user for column name) of employees where employee is (Ask user for id).



```
#3
select &column name from employees
where employee_id= &id;
```

Query Result — All Rows Fetched: 1 in 0.001 seconds

	NAME
1	130

4. Define a variable Employeeid = (of your choice) and define departmentid (ask user to assign the value to department id) now display all the record of employees having defined variable values.

```
#4
DEFINE employee_id=101
DEFINE department_id=&depID;

select *
from employees
where employee_id = &employee_id OR department_id = &dep_ID;
```

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 3 in 0.007 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
2	205	Shelley	Higgins	SHIGGINS	515.123.8080	07-JUN-02	AC_MGR	12008	(null)	101	110
3	206	William	Gietz	WGIETZ	515.123.8181	07-JUN-02	AC_ACCOUNT	8300	(null)	205	110

5. We use the **Set Verify On** command to confirm the changes in the SQL statement or to display the text of a command before and after it replaces substitution variables with values.

6. **Single ampersand(&)** is used to prompt the user for taking the value, **double ampersand(&&)** is used to avoid the re-usability of a variable each time and prevent prompting the user again and again. And the **define** is used for creating a variable and assigning a value to it.
   - Suppose, I want to prompt the user to search by ID to find a person.
     So, I will write emp_id = &ID
   - Incase, I want to know the daily bonus of a person which can vary day to day, so here I need the salary only once: I will write Daily_Bonus=&bonus
   - If a database administarator is working with heavy data and he's to much busy, so he may be using a value multiple times, for this kind o f scenario he would better define a variable with that value.

7. **Project, selection and joining:**
   - Projection: This operation only selects certain columns(fields) from table.
   - Selection: A select operation selects a subset of rows (records) in a table (relation) that satisfy a selection condition.
   - Joining: A join operation combines data from two or more tables based on one or more common column values.