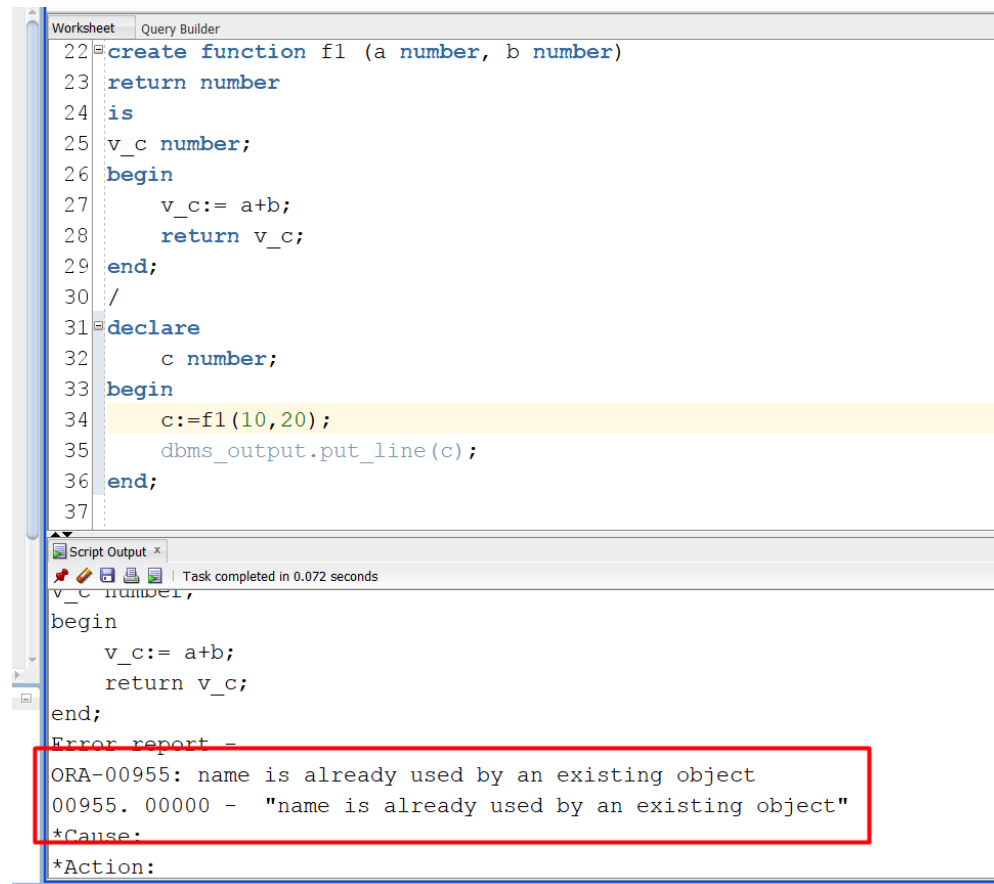


## Functions

1. Create a function with already existing name without using replace



The screenshot shows the SQL Developer interface with a 'Worksheet' tab. The SQL script in the editor is as follows:

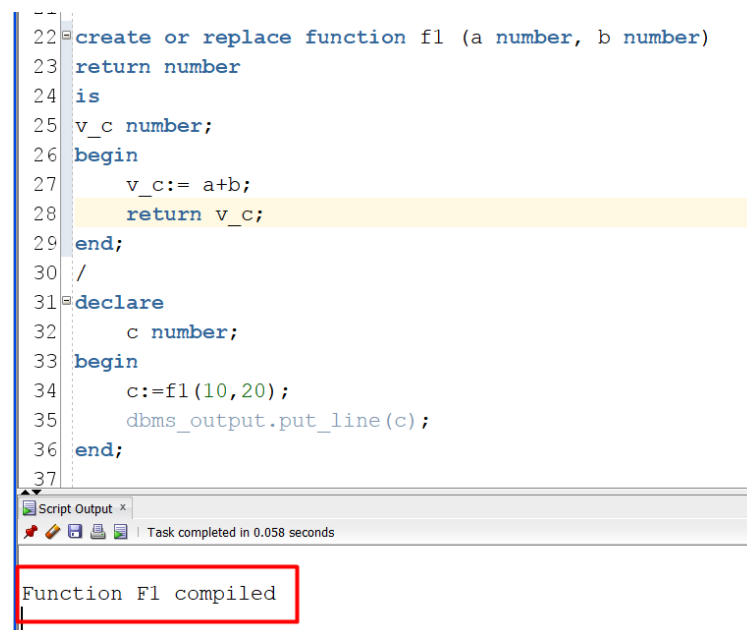
```
22 create function f1 (a number, b number)
23 return number
24 is
25 v_c number;
26 begin
27     v_c:= a+b;
28     return v_c;
29 end;
30 /
31 declare
32     c number;
33 begin
34     c:=f1(10,20);
35     dbms_output.put_line(c);
36 end;
37
```

The script is executed, and the 'Script Output' window shows the following error:

```
Task completed in 0.072 seconds
v_c number,
begin
    v_c:= a+b;
    return v_c;
end;
Error report =
ORA-00955: name is already used by an existing object
00955. 00000 - "name is already used by an existing object"
*Cause:
*Action:
```

The error message is highlighted with a red box.

2. Create a function with already existing name using replace



The screenshot shows the SQL Developer interface with a 'Worksheet' tab. The SQL script in the editor is as follows:

```
22 create or replace function f1 (a number, b number)
23 return number
24 is
25 v_c number;
26 begin
27     v_c:= a+b;
28     return v_c;
29 end;
30 /
31 declare
32     c number;
33 begin
34     c:=f1(10,20);
35     dbms_output.put_line(c);
36 end;
37
```

The script is executed, and the 'Script Output' window shows the following message:

```
Task completed in 0.058 seconds
Function F1 compiled
```

The message 'Function F1 compiled' is highlighted with a red box.

.3. Write a pl sql program using cursor to fetch all employee details,  
and load them into a temp table(only unique values)

```
Worksheet Query Builder
1 set serveroutput on;
2 /* Write a pl sql program using cursor to fetch all employee details,
3 and load them into a temp table(only unique values)
4 */
5 declare
6     cursor emp_details is
7     select e.emp_id,e.emp_name,e.dob,e.hiredate,e.salary,
8           d.dept_id, d.dept_name,
9           j.job_id,j.job_name,
10          a.assignment_id,a.start_date,a.end_date
11 from emp e, dept d, job j, emp_assignment a
12 where e.emp_id = a.emp_id
13 and d.dept_id = j.dept_id
14 and a.job_id = j.job_id;
15 e_counter number;
16 d_counter number;
17 j_counter number;
18 begin
19     for i in emp_details
20     loop
21
22         select count(*) into e_counter from empl where emp_id = i.emp_id;
23         if e_counter = 0 then
24             insert into empl (emp_id, emp_name, DoB, hiredate, salary) values
25
26             (i.emp_id, i.emp_name, i.DoB, i.hiredate, i.salary);
27         else
28             dbms_output.put_line('Data Allready Exist in the table');
29         end if;
30
31         select count(*) into d_counter from dept1 where dept_id = i.dept_id;
32         if d_counter = 0 then
33             insert into dept1 (dept_id,dept_name) values
34             (i.dept_id, i.dept_name);
35         else
36             dbms_output.put_line('Data Allready Exist in the table');
37         end if;
38
39         select count(*) into j_counter from job1 where job_id = i.job_id;
40         if j_counter = 0 then
41             insert into job1 (job_id,job_name,dept_id) values
42             (i.job_id, i.job_name, i.dept_id);
43         else
44             dbms_output.put_line('Data Allready Exist in the table');
45         end if;
46     end loop;
47 end;
```

Script Output x  
Task completed in 0.041 seconds

Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table

PL/SQL procedure successfully completed.

```
47 select * from emp1;  
48 select * from dept1;  
49 select * from job1;  
50
```

Script Output x Query Result x Query Result 1 x Query Result 2 x  
SQL | All Rows Fetched: 10 in 0.001 seconds

	EMP_ID	EMP_NAME	DOB	HIREDATE	SALARY
1	1	Rajesh	11-10-99	05-06-23	10000
2	2	Naveen	19-02-98	24-07-23	12000
3	3	Rakesh	21-06-00	29-08-23	13000
4	4	Sathish	01-01-97	03-09-23	15000
5	5	Praveen	16-12-99	24-10-23	18000
6	6	Sai	08-11-98	26-12-23	20000
7	7	Raja	05-04-96	16-03-23	10000
8	8	Anil	09-10-97	21-02-23	19000
9	9	Sathya	13-11-98	11-01-23	25000
10	10	Ramesh	11-07-99	05-06-23	20000

```
46 /  
47 select * from emp1;  
48 select * from dept1;  
49 select * from job1;  
50
```

Script Output x Query Result x Query Result 1 x  
SQL | All Rows Fetched: 4 in 0.001 seconds

	DEPT_ID	DEPT_NAME
1	50	ACCOUNTING
2	20	OPERATIONS
3	30	SALES
4	40	FINANCE

```
47 select * from empl;
48 select * from dept1;
49 select * from job1;
50
```

Script Output x Query Result x Query Result 1 x Query Re

SQL | All Rows Fetched: 6 in 0.001 second

JOB_ID	JOB_NAME	DEPT_ID
1	101 Manager	50
2	102 Clerk	20
3	103 Asst Manager	30
4	104 Developer	20
5	105 Tester	50
6	106 CEO	40

- 4 Write a pl sql program using cursor and function to fetch all employee details, and load them into a temp table(only unique values)

```
Worksheet Query Builder
3 create or replace function emp_count(a number)
4 return number
5 is emp_counter number;
6 begin
7     select count(*) into emp_counter from empl where emp_id = a;
8     return emp_counter;
9 end;
10 /
11 create or replace function dept_count(b number)
12 return number
13 is dept_counter number;
14 begin
15     select count(*) into dept_counter from dept1 where dept_id = b;
16     return dept_counter;
17 end;
18 /
19 create or replace function job_count(c number)
20 return number
21 is job_counter number;
22 begin
23     select count(*) into job_counter from job1 where job_id = c;
24     return job_counter;
25 end;
26 /
```

```

30 declare
31     cursor emp_details is
32     select e.emp_id,e.emp_name,e.dob,e.hiredate,e.salary,
33            d.dept_id, d.dept_name,
34            j.job_id,j.job_name,
35            a.assignment_id,a.start_date,a.end_date
36 from emp e, dept d, job j, emp_assignment a
37 where e.emp_id = a.emp_id
38 and d.dept_id = j.dept_id
39 and a.job_id = j.job_id;
40
41 begin
42     for i in emp_details
43     loop
44         if emp_count(i.emp_id) = 0 then
45             insert into empl (emp_id, emp_name, DoB, hiredate, salary) values
46                 (i.emp_id, i.emp_name, i.DoB, i.hiredate, i.salary);
47         else
48             dbms_output.put_line('Data Allready Exist in the table');
49         end if;
50
51         if dept_count(i.dept_id) = 0 then
52             insert into dept1 (dept_id,dept_name) values
53                 (i.dept_id, i.dept_name);

```

```

        (i.dept_id, i.dept_name);
    else
        dbms_output.put_line('Data Allready Exist in the table');
    end if;

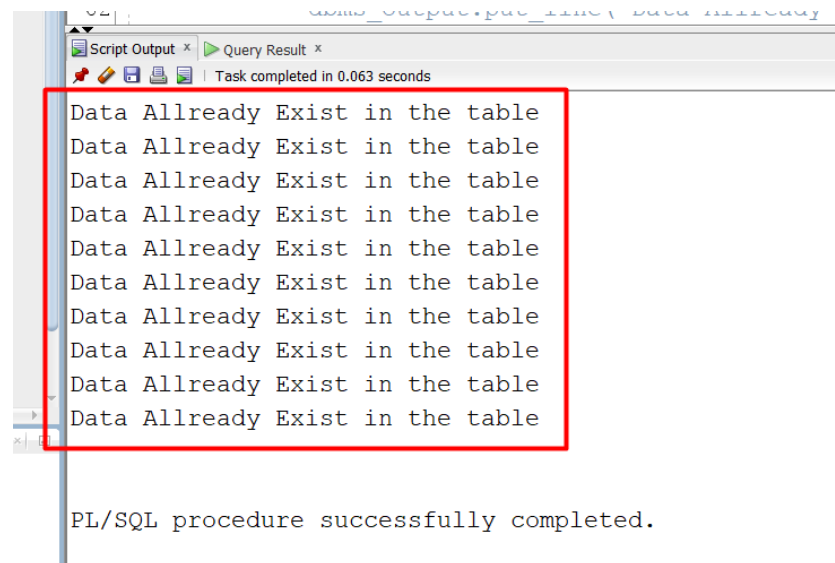
```

```

    if job_count(i.job_id) = 0 then
        insert into job1 (job_id,job_name,dept_id) values
            (i.job_id, i.job_name, i.dept_id);
    else
        dbms_output.put_line('Data Allready Exist in the table');
    end if;
end loop;
end;
/

```

Output:



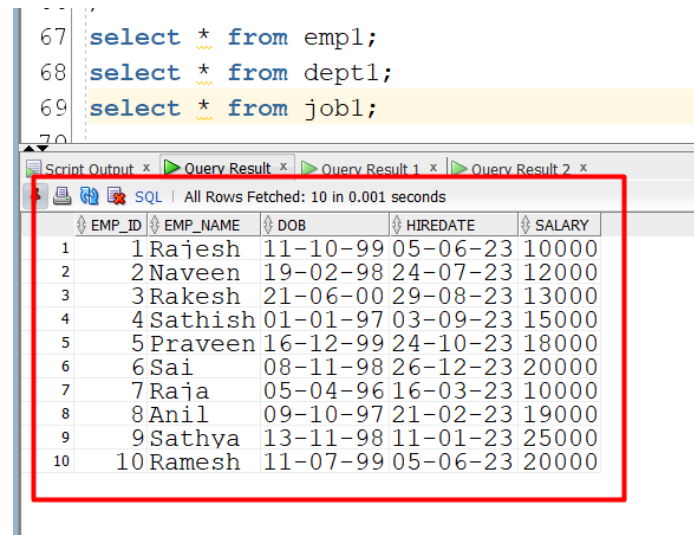
Script Output x Query Result x

Task completed in 0.063 seconds

Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table  
Data Allready Exist in the table

PL/SQL procedure successfully completed.

```
67 select * from emp1;  
68 select * from dept1;  
69 select * from job1;  
70
```

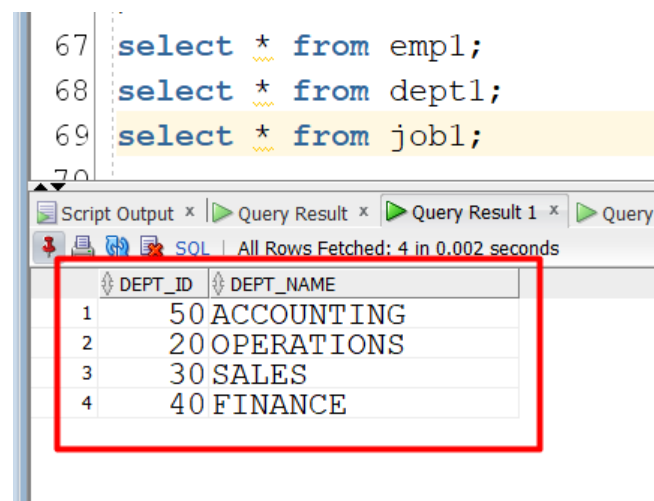


Script Output x Query Result x Query Result 1 x Query Result 2 x

SQL | All Rows Fetched: 10 in 0.001 seconds

EMP_ID	EMP_NAME	DOB	HIREDATE	SALARY
1	1Rajesh	11-10-99	05-06-23	10000
2	2Naveen	19-02-98	24-07-23	12000
3	3Rakesh	21-06-00	29-08-23	13000
4	4Sathish	01-01-97	03-09-23	15000
5	5Praveen	16-12-99	24-10-23	18000
6	6Sai	08-11-98	26-12-23	20000
7	7Raja	05-04-96	16-03-23	10000
8	8Anil	09-10-97	21-02-23	19000
9	9Sathya	13-11-98	11-01-23	25000
10	10Ramesh	11-07-99	05-06-23	20000

```
67 select * from emp1;  
68 select * from dept1;  
69 select * from job1;  
70
```



Script Output x Query Result x Query Result 1 x Query

SQL | All Rows Fetched: 4 in 0.002 seconds

DEPT_ID	DEPT_NAME
1	50 ACCOUNTING
2	20 OPERATIONS
3	30 SALES
4	40 FINANCE

	JOB_ID	JOB_NAME	DEPT_ID
1	101	Manager	50
2	102	Cleark	20
3	103	Asst Manager	30
4	104	Developer	20
5	105	Tester	50
6	106	CEO	40

5. Write a pl sql program to accept the user input and add the data into the temp table and delete from the base table.

```

declare
    cursor emp_details2 is
    select e.emp_id,e.emp_name,e.dob,e.hiredate,e.salary,
           d.dept_id, d.dept_name,
           j.job_id,j.job_name,
           a.assignment_id,a.start_date,a.end_date
    from emp e, dept d, job j, emp_assignment a
    where e.emp_id = a.emp_id
    and d.dept_id = j.dept_id
    and a.job_id = j.job_id
    and e.emp_id=:emp_id;

    cursor emp_details3 is
    select e.emp_id,e.emp_name,e.dob,e.hiredate,e.salary,
           d.dept_id, d.dept_name,
           j.job_id,j.job_name,
           a.assignment_id,a.start_date,a.end_date
    from emp e, dept d, job j, emp_assignment a
    where e.emp_id = a.emp_id
    and d.dept_id = j.dept_id
    and a.job_id = j.job_id
    and d.dept_id=:dept_id;

    e_counter number;
    d counter number;

```

```

29 begin
30   for i in emp_details2
31     loop
32       select count(*) into e_counter from emp2 where emp_id = i.emp_id;
33       if e_counter = 0 then
34         insert into emp2 (emp_id,emp_name,dob,hiredate,salary)
35         values (i.emp_id,i.emp_name,i.dob,i.hiredate,i.salary);
36         delete from emp where emp_id = i.emp_id;
37       elsif e_counter > 0 then
38         dbms_output.put_line('Date already exist in the table');
39       end if;
40     end loop;
41
42   for j in emp_details3
43     loop
44       select count(*) into d_counter from dept2 where dept_id = j.dept_id;
45       if d_counter = 0 then
46         insert into dept2 (dept_id,dept_name) values (j.dept_id, j.dept_name);
47         delete from dept where dept_id = j.dept_id;
48       else
49         dbms_output.put_line('Date already exist in the table');
50       end if;
51     end loop;
52 end;

```

Script Output x

Task completed in 0.054 seconds

Date already exist in the table  
Date already exist in the table

PL/SQL procedure successfully completed.

```

54 select * from emp2;
55 select * from emp;
56 select * from dept;
57 select * from dept2;
58

```

APEX: select \* from emp2

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x

SQL All Rows Fetched: 3 in 0.002 seconds

	EMP_ID	EMP_NAME	DOB	HIREDATE	SALARY
1	5	Praveen	16-12-99	24-10-23	18000
2	4	Sathish	01-01-97	03-09-23	15000
3	10	Ramesh	11-07-99	05-06-23	20000



```

54 select * from emp2;
55 select * from emp;
56 select * from dept;
57 select * from dept2;
58

```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x

SQL | All Rows Fetched: 7 in 0.002 seconds

EMP_ID	EMP_NAME	DOB	HIREDATE	SALARY
1	Rajesh	11-10-99	05-06-23	10000
2	Naveen	19-02-98	24-07-23	12000
3	Rakesh	21-06-00	29-08-23	13000
4	Sai	08-11-98	26-12-23	20000
5	Raja	05-04-96	16-03-23	10000
6	Anil	09-10-97	21-02-23	19000
7	Sathya	13-11-98	11-01-23	25000

```

54 select * from emp2;
55 select * from emp;
56 select * from dept;
57 select * from dept2;
58

```

Script Output x Query Result x Query Result 1 x Query Result 2 x

SQL | All Rows Fetched: 4 in 0.002 seconds

DEPT_ID	DEPT_NAME
1	40 FINANCE
2	20 Manager
3	30 Asst Manager
4	50 Sales

```

54 select * from emp2;
55 select * from emp;
56 select * from dept;
57 select * from dept2;
58

```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x

SQL | All Rows Fetched: 3 in 0.001 seconds

DEPT_ID	DEPT_NAME
1	50 ACCOUNTING
2	20 OPERATIONS
3	30 SALES