

Pool File For Oracle Students Trained By Mr. Balram

```
SQL> CREATE TABLE SamplePK01
  2  (
  3    SampID NUMBER(2)
  4    CONSTRAINT SamplePK01_SampID_PK PRIMARY KEY,
  5    SampName VARCHAR2(15),
  6    SampDate DATE
  7  );
```

Table created.

```
SQL> DESC SamplePK01;
```

Name	Null?
SAMPID	NOT
NULL NUMBER(2)	
SAMPNAME	
VARCHAR2(15)	
SAMPDATE	
DATE	

```
SQL> INSERT INTO SamplePK01
  2  VALUES(01, 'Sample01', SYSDATE);
```

1 row created.

```
SQL> INSERT INTO SamplePK01
  2  VALUES(01, 'Sample02', SYSDATE);
```

```
INSERT INTO SamplePK01
*
```

ERROR at line 1:

ORA-00001: unique constraint (SCOTT.SAMPLEPK01_SAMPID_PK) violated

```
SQL> INSERT INTO SamplePK01
  2  VALUES(NULL, 'Sample02', SYSDATE);
```

```
VALUES(NULL, 'Sample02', SYSDATE)
*
```

ERROR at line 2:

ORA-01400: cannot insert NULL into ("SCOTT"."SAMPLEPK01"."SAMPID")

```
SQL> CREATE TABLE SamplePK02
```

```
  2  (
  3    SampID NUMBER(2),
  4    SampName VARCHAR2(15),
  5    SampDate DATE,
  6    CONSTRAINT SamplePK02_SampID_PK PRIMARY KEY(SampID) --Entity
  7  );
```

Table created.

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```
SQL> CREATE TABLE SamplePK03
  2  (
  3  SampID NUMBER(2)
  4  CONSTRAINT SamplePK03_SampID_PK PRIMARY KEY, --Entity Integrity is
Confirmed,
  5  SampName VARCHAR2(15)
  6  CONSTRAINT SamplePK03_SampID_PK PRIMARY KEY, --Generates An Error As
We Cannot Have Two Primary Key Declarations in One Table
  7  SampDate DATE
  8  );
CONSTRAINT SamplePK03_SampID_PK PRIMARY KEY, --Generates An Error As We
Cannot Have Two Primary Key Declarations in One Table
*
```

ERROR at line 6:
ORA-02260: table can have only one primary key

```
SQL> CREATE TABLE SamplePK03
  2  (
  3  SampID NUMBER(2)
  4  CONSTRAINT SamplePK03_SampID_PK PRIMARY KEY, --Entity Integrity is
Confirmed,
  5  SampName VARCHAR2(15)
  6  CONSTRAINT SamplePK03_SampID_NN NOT NULL
  7  CONSTRAINT SamplePK03_SampID_UNQ UNIQUE,
  8  SampDate DATE
  9  );
```

Table created.

SQL> --Behaviour of Parent And Child Records, While Deleting the Parental
Record which has dependent records And The Primary Key Column Values
Which are not having child Records--

SQL>

SQL> SELECT * FROM DEPT;

DEPTNO	DNAME	LOC
40	OPERATIONS	BOSTON
50	SHIPPING	Not Confirmed
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO

SQL> DELETE FROM DEPT WHERE DEPTNO = 50;

1 row deleted.

SQL> COMMIT;

Commit complete.

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```
SQL> SELECT * FROM EMP;
```

COMM	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL
	DEPTNO					
300	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600
500	7521	WARD	SALESMAN	7698	22-FEB-81	1250
1400	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250
30	7698	BLAKE	MANAGER	7839	01-MAY-81	2850
0	7844	TURNER	SALESMAN	7698	08-SEP-81	1500
30	7900	JAMES	CLERK	7698	03-DEC-81	950
20	7369	SMITH	CLERK	7902	17-DEC-80	800
20	7566	JONES	MANAGER	7839	02-APR-81	2975
10	7782	CLARK	MANAGER	7839	09-JUN-81	2450
20	7788	SCOTT	ANALYST	7566	19-APR-87	3000
10	7839	KING	PRESIDENT		17-NOV-81	5000
20	7876	ADAMS	CLERK	7788	23-MAY-87	1100
20	7902	FORD	ANALYST	7566	03-DEC-81	3000
10	7934	MILLER	CLERK	7782	23-JAN-82	1300

```
14 rows selected.
```

```
SQL> DELETE FROM DEPT WHERE DEPTNO = 40;
```

```
1 row deleted.
```

```
SQL> COMMIT;
```

```
Commit complete.
```

```
SQL> --A Parent Table Data Can Be Deleted When it Has No Corresponding  
Child Records
```

```
SQL> DELETE FROM DEPT  
2 WHERE DEPTNO = 30;
```

```
DELETE FROM DEPT
```

```
*
```

```
ERROR at line 1:
```

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ORA-02292: integrity constraint (SCOTT.FK_DEPTNO) violated - child record found

```
SQL> DELETE FROM EMP
      2 WHERE DEPTNO = 30;
```

6 rows deleted.

```
SQL> SELECT * FROM EMP;
```

COMM	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL
		DEPTNO				
20	7369	SMITH	CLERK	7902	17-DEC-80	800
20	7566	JONES	MANAGER	7839	02-APR-81	2975
10	7782	CLARK	MANAGER	7839	09-JUN-81	2450
20	7788	SCOTT	ANALYST	7566	19-APR-87	3000
10	7839	KING	PRESIDENT		17-NOV-81	5000
20	7876	ADAMS	CLERK	7788	23-MAY-87	1100
20	7902	FORD	ANALYST	7566	03-DEC-81	3000
10	7934	MILLER	CLERK	7782	23-JAN-82	1300

8 rows selected.

```
SQL> DELETE FROM EMP
      2 WHERE DEPTNO =
      3
SQL> DELETE FROM DEPT
      2 WHERE DEPTNO = 30;
```

1 row deleted.

```
SQL> ROLLBACK;
```

Rollback complete.

```
SQL> SELECT * FROM EMP;
```

COMM	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL
		DEPTNO				

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300	7499 ALLEN 30	SALESMAN	7698 20-FEB-81	1600
500	7521 WARD 30	SALESMAN	7698 22-FEB-81	1250
1400	7654 MARTIN 30	SALESMAN	7698 28-SEP-81	1250
30	7698 BLAKE	MANAGER	7839 01-MAY-81	2850
0	7844 TURNER 30	SALESMAN	7698 08-SEP-81	1500
30	7900 JAMES	CLERK	7698 03-DEC-81	950
20	7369 SMITH	CLERK	7902 17-DEC-80	800
20	7566 JONES	MANAGER	7839 02-APR-81	2975
10	7782 CLARK	MANAGER	7839 09-JUN-81	2450
20	7788 SCOTT	ANALYST	7566 19-APR-87	3000
10	7839 KING	PRESIDENT	17-NOV-81	5000
20	7876 ADAMS	CLERK	7788 23-MAY-87	1100
20	7902 FORD	ANALYST	7566 03-DEC-81	3000
10	7934 MILLER	CLERK	7782 23-JAN-82	1300

14 rows selected.