**SAVE EXCEPTION**

Save exceptions will record any exception during bulk operation and continue with processing.

**Example**

**Without storing the error in table , throwing it to console.**

CREATE OR replace PROCEDURE test\_Exception

AS

CURSOR emp\_cur IS

SELECT empno,

Ename||’excep’ as ename,

Job,

Mgr,

Hiredate,

Sal

Comm,

Deptno

FROM emp;

TYPE emp\_Rec IS RECORD

(

Empno emp.empno%TYPE,

Ename VARCHAR2(200),

Job emp.job%TYPE,

Mgr emp.mgr%TYPE,

Hiredate emp.hiredate%TYPE,

Sal emp.sal%TYPE,

Comm emp.comm%TYPE,

Deptno emp.deptno%TYEP);

TYPE type\_emp\_rec IS TABLE OF emp\_rec INDEX BY PLS\_INTEGER;

Rec\_Tab type\_rmp\_rec;

L\_error\_count NUMBER;

L\_Error NUMBER:=0;

BEGIN

OPEN emp\_cur;

LOOP

FETCH emp\_cur BULK COLLECT INTO rec\_Tab;

EXIT WHEN rec\_tab.count=0;

BEGIN

FORALL I in 1..rec\_tab.count SAVE EXCEPTIONS

INSERT INTO emp\_hist

VALUES

(rec\_tab(i).empno,

rec\_tab(i).ename,

rec\_tab(i).job,

rec\_tab(i).mgr,

rec\_tab(i).hiredate,

rec\_tab(i).sal,

rec\_tab(i).comm,

rec\_tab(i).deptno);

EXCEPTION WHEN OTHERS THEN

ROLLBACK;

L\_error:=1;

L\_error\_count:=SQL%BULK\_EXCEPTIONS.count;

DBMS\_OUTPUT.PUT\_LINE(‘Total Errors :’ ||l\_error\_count);

For I in 1..l\_error\_count

DBMS\_OUTPUT.PUT\_LINE(‘Error ‘||i||’Array index ‘||SQL%BULK\_EXCEPTIONS(i).error\_index||

‘Error code ‘||SQLERRM(-SQL%BULK\_EXCEPTIONS(i).error\_code);

END LOOP;

END;

END LOOP;

END;

Example 2

To raise error and rollback if any error but to log records which failed .

CREATE OR replace PROCEDURE test\_Exception

AS

CURSOR emp\_cur IS

SELECT empno,

Ename||’excep’ as ename,

Job,

Mgr,

Hiredate,

Sal

Comm,

Deptno

FROM emp;

TYPE emp\_Rec IS RECORD

(

Empno emp.empno%TYPE,

Ename VARCHAR2(200),

Job emp.job%TYPE,

Mgr emp.mgr%TYPE,

Hiredate emp.hiredate%TYPE,

Sal emp.sal%TYPE,

Comm emp.comm%TYPE,

Deptno emp.deptno%TYEP);

TYPE type\_emp\_rec IS TABLE OF emp\_rec INDEX BY PLS\_INTEGER;

Rec\_Tab type\_rmp\_rec;

L\_error\_count NUMBER;

L\_Error NUMBER:=0;

BEGIN

OPEN emp\_cur;

LOOP

FETCH emp\_cur BULK COLLECT INTO rec\_Tab;

EXIT WHEN rec\_tab.count=0;

BEGIN

FORALL I in 1..rec\_tab.count SAVE EXCEPTIONS

INSERT INTO emp\_hist

VALUES

(rec\_tab(i).empno,

rec\_tab(i).ename,

rec\_tab(i).job,

rec\_tab(i).mgr,

rec\_tab(i).hiredate,

rec\_tab(i).sal,

rec\_tab(i).comm,

rec\_tab(i).deptno);

EXCEPTION WHEN OTHERS THEN

ROLLBACK;

L\_error:=1;

L\_error\_count:=SQL%BULK\_EXCEPTIONS.count;

DBMS\_OUTPUT.PUT\_LINE(‘Total Errors :’ ||l\_error\_count);

For I in 1..l\_error\_count

DBMS\_OUTPUT.PUT\_LINE(‘Error ‘||i||’Array index ‘||SQL%BULK\_EXCEPTIONS(i).error\_index||

‘Error code ‘||SQLERRM(-SQL%BULK\_EXCEPTIONS(i).error\_code);

END LOOP;

END;

END LOOP;

**IF l\_error=1 THEN**

**RAISE\_APPLICATION\_ERROR(-20001,’Error while inserting Data check log’);**

**END IF;**

END;

**Example 3**

**To Log errors in log table**

CREATE OR replace PROCEDURE test\_Exception

AS

CURSOR emp\_cur IS

SELECT empno,

Ename||’excep’ as ename,

Job,

Mgr,

Hiredate,

Sal

Comm,

Deptno

FROM emp;

TYPE emp\_Rec IS RECORD

(

Empno emp.empno%TYPE,

Ename VARCHAR2(200),

Job emp.job%TYPE,

Mgr emp.mgr%TYPE,

Hiredate emp.hiredate%TYPE,

Sal emp.sal%TYPE,

Comm emp.comm%TYPE,

Deptno emp.deptno%TYEP);

TYPE type\_emp\_rec IS TABLE OF emp\_rec INDEX BY PLS\_INTEGER;

Rec\_Tab type\_rmp\_rec;

L\_error\_count NUMBER;

L\_Error NUMBER:=0;

**L\_error\_index number;**

**L\_error\_code VARCHAR2(4000);**

BEGIN

OPEN emp\_cur;

LOOP

FETCH emp\_cur BULK COLLECT INTO rec\_Tab;

EXIT WHEN rec\_tab.count=0;

BEGIN

FORALL I in 1..rec\_tab.count SAVE EXCEPTIONS

INSERT INTO emp\_hist

VALUES

(rec\_tab(i).empno,

rec\_tab(i).ename,

rec\_tab(i).job,

rec\_tab(i).mgr,

rec\_tab(i).hiredate,

rec\_tab(i).sal,

rec\_tab(i).comm,

rec\_tab(i).deptno);

EXCEPTION WHEN OTHERS THEN

ROLLBACK;

L\_error:=1;

L\_error\_count:=SQL%BULK\_EXCEPTIONS.count;

DBMS\_OUTPUT.PUT\_LINE(‘Total Errors :’ ||l\_error\_count);

For I in 1..l\_error\_count

**L\_error\_index:=substr(SQL%BULK\_EXCEPTIONS(i).error\_index,1,400);**

**L\_error\_code:= substr(SQLERRM(-SQL%BULK\_EXCEPTIONS(i).error\_code),1,3000);**

**Insert into emp\_log VALUES**

**(l\_error\_index,**

**L\_error\_code,**

**Sysdate,**

**‘Insert’);**

**Commit;**

END LOOP;

END;

END LOOP;

**IF l\_error=1 THEN**

**RAISE\_APPLICATION\_ERROR(-20001,’Error while inserting Data check log’);**

**END IF;**

END;

Example4 :

To raise exception other than bulk exception caused due to some other errors.

CREATE OR replace PROCEDURE test\_Exception

AS

CURSOR emp\_cur IS

SELECT empno,

Ename||’excep’ as ename,

Job,

Mgr,

Hiredate,

Sal

Comm,

Deptno

FROM emp;

TYPE emp\_Rec IS RECORD

(

Empno emp.empno%TYPE,

Ename VARCHAR2(200),

Job emp.job%TYPE,

Mgr emp.mgr%TYPE,

Hiredate emp.hiredate%TYPE,

Sal emp.sal%TYPE,

Comm emp.comm%TYPE,

Deptno emp.deptno%TYEP);

TYPE type\_emp\_rec IS TABLE OF emp\_rec INDEX BY PLS\_INTEGER;

Rec\_Tab type\_rmp\_rec;

L\_error\_count NUMBER;

L\_Error NUMBER:=0;

**L\_error\_index number;**

**L\_error\_code VARCHAR2(4000);**

BEGIN

OPEN emp\_cur;

LOOP

FETCH emp\_cur BULK COLLECT INTO rec\_Tab;

EXIT WHEN rec\_tab.count=0;

BEGIN

FORALL I in 1..rec\_tab.count SAVE EXCEPTIONS

INSERT INTO emp\_hist

VALUES

(rec\_tab(i).empno,

rec\_tab(i).ename,

rec\_tab(i).job,

rec\_tab(i).mgr,

rec\_tab(i).hiredate,

rec\_tab(i).sal,

rec\_tab(i).comm,

rec\_tab(i).deptno);

EXCEPTION WHEN OTHERS THEN

ROLLBACK;

L\_error:=1;

L\_error\_count:=SQL%BULK\_EXCEPTIONS.count;

DBMS\_OUTPUT.PUT\_LINE(‘Total Errors :’ ||l\_error\_count);

For I in 1..l\_error\_count

**L\_error\_index:=substr(SQL%BULK\_EXCEPTIONS(i).error\_index,1,400);**

**L\_error\_code:= substr(SQLERRM(-SQL%BULK\_EXCEPTIONS(i).error\_code),1,3000);**

**Insert into emp\_log VALUES**

**(l\_error\_index,**

**L\_error\_code,**

**Sysdate,**

**‘Insert’);**

**Commit;**

END LOOP;

END;

END LOOP;

**IF l\_error=1 THEN**

**RAISE\_APPLICATION\_ERROR(-20001,’Error while inserting Data check log’);**

**END IF;**

**EXCEPTION WHEN OTHERS THEN**

**RAISE\_APPLICATION\_ERROR(-20002,’Error other than bulk exception’);**

END;