

UCS1412 – DBMS Lab
Assignment – 8

Name: Jayannthan P T

Dept: CSE 'A'

Roll No.: 205001049

Title: Exceptions

Spool File:

```
SET SERVEROUTPUT ON;
```

```
-- Write a PL/SQL block to handle the following exceptions:  
-- 1. For the given receipt number, if there are no rows then display as "No order with  
the  
-- given receipt <number>". If the receipt contains more than one item, display as  
-- "The given receipt <number> contains more than one item". If the receipt contains  
-- single item, display as "The given receipt <number> contains exactly one item". Use  
-- predefined exception handling.
```

```
SELECT * FROM ITEM_LIST WHERE RNO=18129;
```

RNO	ORDINAL	ITEM
18129	1	70-TU

```
DECLARE
```

```
  RNO_INPUT ITEM_LIST.RNO%TYPE;
```

```
  CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;
```

```
  ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;
```

```
BEGIN
```

```
  RNO_INPUT:='&RECEIPT_NO_INPUT';
```

```
  OPEN ITEM_LIST_CURSOR;
```

```
  FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;
```

```
  CLOSE ITEM_LIST_CURSOR;
```

```
  SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;
```

```
  DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');
```

```
EXCEPTION
```

```
  WHEN NO_DATA_FOUND THEN
```

```
    DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);
```

```
  WHEN TOO_MANY_ROWS THEN
```

```
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE  
ITEM');
```

```
END;
```

```
/
```

```

old:DECLARE
    RNO_INPUT ITEM_LIST.RNO%TYPE;
    CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;

BEGIN
    RNO_INPUT:='&RECEIPT_NO_INPUT';
    OPEN ITEM_LIST_CURSOR;
    FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;
    CLOSE ITEM_LIST_CURSOR;
    SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);
    WHEN TOO_MANY_ROWS THEN
        DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE
ITEM');
END;

```

```

new:DECLARE
    RNO_INPUT ITEM_LIST.RNO%TYPE;
    CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;

BEGIN
    RNO_INPUT:='18129';
    OPEN ITEM_LIST_CURSOR;
    FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;
    CLOSE ITEM_LIST_CURSOR;
    SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);
    WHEN TOO_MANY_ROWS THEN
        DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE
ITEM');
END;

```

THE GIVEN RECEIPT 18129 CONTAINS EXACTLY ONE ITEM

PL/SQL procedure successfully completed.

```
SELECT * FROM ITEM_LIST WHERE RNO=85858;
```

RNO	ORDINAL	ITEM
85858	1	20-CA-7.5
85858	2	70-M-VA-SM-DZ
85858	3	51-BLU

DECLARE

```
RNO_INPUT ITEM_LIST.RNO%TYPE;  
CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;
```

BEGIN

```
RNO_INPUT:='&RECEIPT_NO_INPUT';  
OPEN ITEM_LIST_CURSOR;  
FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;  
CLOSE ITEM_LIST_CURSOR;  
SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT '||RNO_INPUT||' CONTAINS EXACTLY ONE ITEM');
```

EXCEPTION

```
WHEN NO_DATA_FOUND THEN  
    DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT '||RNO_INPUT);  
WHEN TOO_MANY_ROWS THEN  
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT '||RNO_INPUT||' CONTAINS MORE THAN ONE  
ITEM');
```

END;

/

old:DECLARE

```
RNO_INPUT ITEM_LIST.RNO%TYPE;  
CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;
```

BEGIN

```
RNO_INPUT:='&RECEIPT_NO_INPUT';  
OPEN ITEM_LIST_CURSOR;  
FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;  
CLOSE ITEM_LIST_CURSOR;  
SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT '||RNO_INPUT||' CONTAINS EXACTLY ONE ITEM');
```

EXCEPTION

```
WHEN NO_DATA_FOUND THEN  
    DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT '||RNO_INPUT);  
WHEN TOO_MANY_ROWS THEN  
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT '||RNO_INPUT||' CONTAINS MORE THAN ONE  
ITEM');
```

END;

new:DECLARE

```
RNO_INPUT ITEM_LIST.RNO%TYPE;  
CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;
```

BEGIN

```
RNO_INPUT:='85858';  
OPEN ITEM_LIST_CURSOR;  
FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;  
CLOSE ITEM_LIST_CURSOR;  
SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;  
DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT '||RNO_INPUT||' CONTAINS EXACTLY ONE ITEM');
```

EXCEPTION

WHEN NO_DATA_FOUND THEN

DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);

WHEN TOO_MANY_ROWS THEN

DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE ITEM');

END;

THE GIVEN RECEIPT 85858 CONTAINS MORE THAN ONE ITEM

PL/SQL procedure successfully completed.

SELECT * FROM ITEM_LIST WHERE RNO=11111;

no rows selected

DECLARE

RNO_INPUT ITEM_LIST.RNO%TYPE;

CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;

ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;

BEGIN

RNO_INPUT:='&RECEIPT_NO_INPUT';

OPEN ITEM_LIST_CURSOR;

FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;

CLOSE ITEM_LIST_CURSOR;

SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;

DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');

EXCEPTION

WHEN NO_DATA_FOUND THEN

DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);

WHEN TOO_MANY_ROWS THEN

DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE ITEM');

END;

/

old:DECLARE

RNO_INPUT ITEM_LIST.RNO%TYPE;

CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;

ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;

BEGIN

RNO_INPUT:='&RECEIPT_NO_INPUT';

OPEN ITEM_LIST_CURSOR;

FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;

CLOSE ITEM_LIST_CURSOR;

SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;

DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');

EXCEPTION

WHEN NO_DATA_FOUND THEN

DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);

WHEN TOO_MANY_ROWS THEN

```

        DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE
ITEM');
END;

new:DECLARE
    RNO_INPUT ITEM_LIST.RNO%TYPE;
    CURSOR ITEM_LIST_CURSOR IS SELECT * FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    ITEM_LIST_ROW ITEM_LIST_CURSOR%ROWTYPE;

BEGIN
    RNO_INPUT:='11111.';
    OPEN ITEM_LIST_CURSOR;
    FETCH ITEM_LIST_CURSOR INTO ITEM_LIST_ROW;
    CLOSE ITEM_LIST_CURSOR;
    SELECT * INTO ITEM_LIST_ROW FROM ITEM_LIST WHERE RNO=RNO_INPUT;
    DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS EXACTLY ONE ITEM');
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('NO ORDER WITH THE GIVEN RECEIPT ' || RNO_INPUT);
    WHEN TOO_MANY_ROWS THEN
        DBMS_OUTPUT.PUT_LINE('THE GIVEN RECEIPT ' || RNO_INPUT || ' CONTAINS MORE THAN ONE
ITEM');
END;
NO ORDER WITH THE GIVEN RECEIPT 11111

```

PL/SQL procedure successfully completed.

-- 2. While inserting the receipt details, raise an exception when the receipt date is greater
-- than the current date.

```

SET SERVEROUTPUT ON;
desc receipts;

```

Name	Null?	Type
RNO	NOT NULL	NUMBER
RDATE		DATE
CID		NUMBER

```

CREATE OR REPLACE TRIGGER CHECKINSDATE
BEFORE INSERT ON RECEIPTS FOR EACH ROW

```

```

DECLARE
    THROWEXCEPTION EXCEPTION;
    TODAYDATE DATE;
BEGIN

```

```

SELECT SYSDATE INTO TODAYDATE FROM DUAL;
IF(:NEW.RDATE>TODAYDATE) THEN
    RAISE THROWEXCEPTION;
END IF;

EXCEPTION
    WHEN THROWEXCEPTION THEN
        RAISE_APPLICATION_ERROR(-20009,'RECEIPT DATE GREATER THAN TODAYDATE');
END;
/

```

Trigger CHECKINSDATE compiled

```
INSERT INTO RECEIPTS VALUES(11111,'22-May-2023',10);
```

Error starting at line : 21 in command -

```
INSERT INTO RECEIPTS VALUES(11111,'22-May-2023',10)
```

Error report -

ORA-20009: RECEIPT DATE GREATER THAN TODAYDATE

ORA-06512: at "SYSTEM.CHECKINSDATE", line 12

ORA-04088: error during execution of trigger 'SYSTEM.CHECKINSDATE'

```
INSERT INTO RECEIPTS VALUES(11111,'25-May-2022',10);
```

Error starting at line : 22 in command -

```
INSERT INTO RECEIPTS VALUES(11111,'25-May-2022',10)
```

Error report -

ORA-00001: unique constraint (SYSTEM.RNO_PKEY) violated