Lesson 04 – CURSORS

SLIDE 6 - Implicit Cursors – Example

BEGIN

UPDATE dept SET dname ='Production' WHERE deptno= 50;

IF SQL%NOTFOUND THEN

INSERT into department\_masters VALUES ( 50, 'Production');

END IF;

END;

/

BEGIN

UPDATE dept SET dname ='Production' WHERE deptno = 50;

IF SQL%ROWCOUNT = 0 THEN

INSERT into department\_masters VALUES ( 50, 'Production');

END IF;

END;

/

SLIDE 23 - Cursor using LOOP … END LOOP

DECLARE

v\_sno student\_marks.student\_code%type;

v\_sub3 student\_marks.subject3%type;

cursor c\_stud\_marks is

select student\_code,subject3 from student\_marks;

BEGIN

OPEN c\_stud\_marks;

FETCH c\_stud\_marks into v\_sno,v\_sub3;

WHILE c\_stud\_marks%found

LOOP

UPDATE student\_marks SET subject3 =subject3 + 10 WHERE student\_code = v\_sno ;

dbms\_output.put\_line(v\_sno || ' ' || v\_sub3);

FETCH c\_stud\_marks into v\_sno,v\_sub3;

END LOOP ;

CLOSE c\_stud\_marks;

END;

/

* + Example 1: To add 10 marks in subject3 for all students

DECLARE

v\_sno student\_marks.student\_code%type;

cursor c\_stud\_marks is

select student\_code from student\_marks;

BEGIN

OPEN c\_stud\_marks;

FETCH c\_stud\_marks into v\_sno;

WHILE c\_stud\_marks%found

LOOP

UPDATE student\_marks SET subject3 =subject3 + 1 WHERE student\_code = v\_sno ;

FETCH c\_stud\_marks into v\_sno;

END LOOP ;

CLOSE c\_stud\_marks;

END;

/

SLIDE 28 - Example 2: The block calculates the total marks of each student for all the subjects. If total marks are greater than 220 then it will insert that student detail in “Performance” table

DECLARE

cursor c\_stud\_marks is select \* from student\_marks;

total\_marks number(4);

BEGIN

FOR mks in c\_stud\_marks

LOOP

total\_marks:=mks.subject1+mks.subject2+mks.subject3;

IF (total\_marks >220) THEN

INSERT into performance

VALUES (mks.student\_code,total\_marks);

END IF;

END LOOP;

END;

/

SLIDE 32 - SELECT… FOR UPDATE – Examples

**To promote professors who earn more than 20000**

DECLARE

CURSOR c\_staff is

SELECT staff\_code, staff\_masters.design\_code

FROM staff\_masters,designation\_masters

WHERE design\_name = 'Professor'

and staff\_sal > 20000

and staff\_masters.design\_code =designation\_masters.design\_code

FOR UPDATE OF staff\_masters.design\_code NOWAIT;

d\_code designation\_masters.design\_code%type;

BEGIN

SELECT design\_code into d\_code

FROM designation\_masters

WHERE design\_name='Director';

FOR v\_rec in c\_staff

LOOP

UPDATE staff\_masters SET design\_code = d\_code

WHERE current of c\_staff;

END LOOP;

END;

/

SLIDE 42 - Cursor Variables - Example

CREATE TABLE TEMP\_TABLE

(

STAFF\_CODE NUMBER(6)

,STAFF\_NAME VARCHAR2(20)

)

/

DECLARE

TYPE staffcurtyp is REF CURSOR RETURN staff\_masters%rowtype;

staff\_cv staffcurtyp; -- declare cursor variable

staff\_cur staff\_masters%rowtype;

BEGIN

OPEN staff\_cv for select \* from staff\_masters;

LOOP

EXIT WHEN staff\_cv%notfound;

FETCH staff\_cv into staff\_cur;

INSERT into temp\_table

VALUES(staff\_cur.staff\_code,staff\_cur.staff\_name);

END LOOP;

CLOSE staff\_cv;

END;

/

SELECT \* FROM TEMP\_TABLE

/