Practical NO - 05

Title : — Use of control structure and exception handling is mandatory (unamed PL/SQL code block).

objective : — To learn understand and execute process of software application development.

Software Required : — Mysql

Hardware Required — intel i5 - ubuntu os. ①

Theory : — control structure - PL/SQL allows the of an If an statement to control the execution of a block of code If - tHEN, ElSE -If, END-If construct in the code blocks allow specifying certain condition under which a specific block of code should be execute PL/SQL control structure are used to control flow of execution. ②

The flow of control statement can be classified into following.

1) Condition control
2) Interative control
3) sequential control.

① conditional control :- PL/SQL allow the of an If statement to control the execution of a block of code in PL/SQL the IF-THEN, ELSE-If, ELSE -If, END-IF. also used.

Syntax : —   If < condition > THEN
              < Action >

ELSEIF < condition > THEN
       < Action >
ELSE < Action >   END If;

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2) Iterative control :- Iterative control indicates the ability to repeat or skip section of a code block. A loop marks a sequence of statement that has to be repeated.

Syntax : — loop

< sequence of statement >

END loop

① **While loop :-** execute commonds as long as the condition true.

Syntax :— while < condition >

loop

<Action>

END loop

② **For Loop :-** Can be executed when the number of iterations to be executed are known.

Syntax :- for variable IN [REVERSE] start end

loop

<Action>

END loop .

③ **Sequential control :-** Go to statement :- The Go to statement can then make use of this user defined name to jump into that block of code for exception

Syntax : — GOTO Jump < line > ;

<< jump >>

37 Exception :- An exception in on error sitution which aries during program execution when on error occurs exception is raised normal execution is stopped and control transfers to exeception handling part.

Syntax :- → EXCEPTION
WHEN < Exception Name > THEN
< USER Defined Action to Be
Carried out >

1) predefine Exception :- predefine exception is raised automatically whenever there is a violation of oracle coding rules.

e.g. ① DUP_VAL_ON_INDEX - when you try to insert valve into a unique column.

② INVAILD_CURSOR :- It occure when we try accessing an invalid cursoe.

③ login - DENIED :- At the time when user login is denied.

2) User Defined Exception :- To trap buisness rules being violated the technique of raise user defined exceptions and then handling them is used.

Syntax :— DECLARE
< Exception name > EXCEPTION;
BEGIN
< SQL sentence >;
IF < condition > THEN
RAISE < Exception name;
ENDIF;
EXCEPTION

WHEN < Exception name > THEN { user Defined
Action to be taken };
END;

Conclusion :— Hence we studied about the
use of control structure and Exception
Handling.