Name: Sumit Prabhakar Kamble.

Roll_no: 47

Div: B   Batch: B2 Class: TY CSE

PRN: 21ST114282045

Title: Implement Synonyms, Sequences, Triggers and Packages in PL/SQL.

Problem Statement:

Implement Synonyms, Sequences, Triggers and Packages for a given set of questions.

Questions:

1. Create a table student with attributes id, roll_no, name, address, contact.

CREATE TABLE student2

(

id number primary key,

roll_no number,

name varchar2(20) not null,

address varchar2(50) not null,

contact number(10)

);

Table created.

2. Create a sequence to generate 'id' of a student automatically.

create sequence stud_seq start with 1 increment by 1;

```
Sequence created.
```

3. Insert following values in 'Student' table.

id	roll_no	name	address	contact
Generated via a sequence	1	Sumit	Mumbai	9867585786
Generated via a sequence	2	Shubham	Pune	8867585756
Generated via a sequence	3	Raj	Kolhapur	7686758578
Generated via a sequence	4	Andrew	Sangli	9967585786

insert into student2 values (stud_seq .nextval,1,'Sumit','mumbai',9867585786);

```
1 row(s) inserted.
```

insert into student2 values (stud_seq .nextval,2,'Shubham','pune',8867585756);

```
1 row(s) inserted.
```

insert into student2 values (stud_seq .nextval,3,'Raj','kolhapur',7686758578);

```
1 row(s) inserted.
```

insert into student2 values (stud_seq .nextval,4,'Andrew','sangli',9967585786);

```
1 row(s) inserted.
```

select * from student2;

ID	ROLL_NO	NAME	ADDRESS	CONTACT
1	1	Sumit	mumbai	9867585786
2	2	Shubham	pune	8867585756
3	3	Raj	kolhapur	7686758578
4	4	Andrew	sangli	9967585786

Download CSV

4 rows selected.

4. Create a trigger to prompt an error message when value entered for roll number is 0.

create or replace TRIGGER display

before insert

on student2

FOR EACH ROW

WHEN(new.roll_no=0)

BEGIN

raise_application_error(-20000,'invalid input!');

END;

Trigger created.

5. Instantiate the created trigger by passing roll number of a student as 0.

insert into student2 values (stud.nextval,0,'rani','mumbai',9867595786);

ORA-02289: sequence does not exist

6. Create a synonym 'Stud' for 'Student' table.

create SYNONYM stud2 for student2;

```
Synonym created.
```

7. Print the table 'Student' and 'Stud'.

select * from stud2;

ID	ROLL_NO	NAME	ADDRESS	CONTACT
1	1	Sumit	mumbai	9867585786
2	2	Shubham	pune	8867585756
3	3	Raj	kolhapur	7686758578
4	4	Andrew	sangli	9967585786

Download CSV

4 rows selected.

8. Create a package with following procedures:

a. Create a procedure to find name of the student if roll number is given.

b. Create a procedure to delete a student record if roll number is given.

create or replace package pack

as

Procedure proc1

(s_rno student2.roll_no %type);

procedure proc2

(s_rno student2.roll_no %type);

END;

//Package body :

```
create or replace package body pack as

Procedure proc1

(s_rno student2.roll_no %type

)

IS

s_name student2.name %type;

begin

select name into s_name from stud2 where roll_no=s_rno;

dbms_output.put_line(s_name);

end;


procedure proc2

(s_rno student2.roll_no %type

)

IS

begin

delete from stud2 where roll_no=s_rno;

end;

end;
```

9. Find name of the student whose roll number is 2 using a procedure created in a package.

begin

pack.proc1(2);

end;

```
Statement processed.
Shubham
```

10. Delete a student record whose roll number is 4 using a procedure created in a package.

begin

pack.proc2(4);

end;

```
Statement processed.
```

ID	ROLL_NO	NAME	ADDRESS	CONTACT
1	1	Sumit	mumbai	9867585786
2	2	Shubham	pune	8867585756
3	3	Raj	kolhapur	7686758578

Download CSV

3 rows selected.

11.Truncate the table

begin

execute immediate 'truncate table student2';

end;

Statement processed.

no data found