**Slip 20-30**

**S21-**

create table clg34(

code number(3) primary key,

cname varchar2(20),

addr varchar2(20)

);

create table tech34(

tid number(3) primary key,

tname varchar2(15) not null,

qual varchar2(15),

spec varchar2(15),

sal number(7),

desg varchar2(15),

code number(3) references clg34(code) on delete cascade

);

INSERT INTO clg34 VALUES (1, 'Shamrao college', 'Address A');

INSERT INTO clg34 VALUES (2, 'Vp College ', 'Address B');

INSERT INTO clg34 VALUES (3, 'Tc College ', 'Address C');

INSERT INTO clg34 VALUES (4, 'Target College ', 'Address D');

INSERT INTO clg34 VALUES (5, 'pune assoc college', 'Address E');

INSERT INTO tech34 VALUES (101, 'Shami kharat', 'M.Tech', 'Computer Science', 80000, 'Professor', 1);

INSERT INTO tech34 VALUES (102, 'Jayesh waghmare', 'Ph.D.', 'Electrical Engineering', 90000, 'Associate Professor', 2);

INSERT INTO tech34 VALUES (103, 'Bob wilson', 'B.Tech', 'Mechanical Engineering', 75000, 'Assistant Professor', 3);

INSERT INTO tech34 VALUES (104, 'manish patnakar', 'M.Sc.', 'Physics', 70000, 'Lecturer', 4);

INSERT INTO tech34 VALUES (105, 'Chris elvish', 'Ph.D.', 'Chemistry', 85000, 'Professor', 5);

**================================================================================**

**S22**

create table country34(

cid number(3) primary key,

cname varchar2(15),

nos number(8),

area varchar2(15) not null,

loc varchar2(15),

population number(10)

);

create table citizen34(

id number(3) primary key,

name varchar2(15),

mtounge varchar2(15),

state varchar2(15),

cid number(3) references country34(cid) on delete cascade

);

insert into country34 values(1,'India',28,'delhi','dalal stret',9000000);

insert into country34 values(2,'china',38,'bejing','jyuhia kimso',5400000);

insert into country34 values(3,'USA',34,'new york','cabi street',930000);

insert into country34 values(4,'europe',28,'brusel','hedge area ',90000);

insert into country34 values(5,'argentina',28,'beulo arias','mngose stret',900300);

insert into citizen34 values(101,'mangit','hindi','UP',1);

insert into citizen34 values(102,'ragu','hindi','UP',2);

insert into citizen34 values(103,'manisha','marathi','MP',3);

insert into citizen34 values(104,'brusel','english','BR',4);

insert into citizen34 values(105,'alian','english','ST',5);

**Q1)** create or replace procedure p11 is

cursor c11 is

select citizen34.id,name from citizen34,country34 where country34.cid = country34.cid and citizen34.mtounge='marathi' and country34.cname='India';

begin

for i in c11

loop

dbms\_output.put\_line(i.id||' '||i.name);

end loop;

end;

begin

p11;

end;

q2)

create or replace trigger t22

before insert or update on citizen34

for each row

begin

if(:new.state <=0) then

raise\_application\_error(-20015,'Number of states Should Not be greater than 0');

end if;

end;

insert INTO comper3400 VALUES ('ABC Corporation', 'Ravi Kumar', 0)

**================================================================================**

**S23-**

CREATE TABLE wholesaler3400 (

wno NUMBER(3) PRIMARY KEY,

wname VARCHAR2(50) NOT NULL,

address VARCHAR2(50),

city VARCHAR2(50)

);

CREATE TABLE product3400 (

pno NUMBER(4) PRIMARY KEY,

pname VARCHAR2(50) NOT NULL,

rate NUMBER(7) CHECK (rate > 0)

);

CREATE TABLE wp00(

wno NUMBER(3) REFERENCES wholesaler3400(wno) ON DELETE CASCADE,

pno NUMBER(4) REFERENCES product3400(pno) ON DELETE CASCADE,

quantity NUMBER(5) CHECK (quantity > 0)

);

INSERT INTO wholesaler3400 VALUES (1, 'MR. Patil', '123 Street', 'City A');

INSERT INTO wholesaler3400 VALUES (2, 'Sharma Distributors', '456 Road', 'City B');

INSERT INTO wholesaler3400 VALUES (3, 'Singh Enterprises', '789 Avenue', 'City C');

INSERT INTO wholesaler3400 VALUES (4, 'Patel Traders', '101 Boulevard', 'City D');

INSERT INTO wholesaler3400 VALUES (5, 'Kumar Suppliers', '202 Lane', 'City E');

INSERT INTO product3400 VALUES (101, 'Sugar', 50.00);

INSERT INTO product3400 VALUES (102, 'Tea Leaves', 75.00);

INSERT INTO product3400 VALUES (103, 'Rice', 40.00);

INSERT INTO product3400 VALUES (104, 'Wheat Flour', 30.00);

INSERT INTO product3400 VALUES (105, 'Spices', 60.00);

INSERT INTO wp00 VALUES (1, 101, 200);

INSERT INTO wp00 VALUES (2, 102, 150);

INSERT INTO wp00 VALUES (3, 103, 100);

INSERT INTO wp00 VALUES (4, 104, 250);

INSERT INTO wp00 VALUES (5, 105, 120);

CREATE TABLE lab340(

lno NUMBER(3) PRIMARY KEY,

lname VARCHAR2(50),

cap NUMBER(5) NOT NULL,

equipment VARCHAR2(100)

);

INSERT ALL

INTO lab340 VALUES (1, 'Chemistry Lab', 30, 'Bunsen burners, Beakers, Test tubes')

INTO lab340 VALUES (2, 'Physics Lab', 25, 'Optical benches, Pulleys, Pendulums')

INTO lab340 VALUES (3, 'Computer Lab', 20, 'Computers, Projectors, Whiteboards')

INTO lab340 VALUES (4, 'Biology Lab', 35, 'Microscopes, Specimens, Petri dishes')

INTO lab340 VALUES (5, 'Math Lab', 15, 'Geometric shapes, Calculators, Graph paper')

SELECT \* FROM dual;

CREATE TABLE stud340(

rno NUMBER(5) PRIMARY KEY,

sname VARCHAR2(50),

class VARCHAR2(20),

timetable VARCHAR2(100),

lno NUMBER(3) REFERENCES lab340(lno) ON DELETE CASCADE

);

INSERT ALL

INTO stud340 VALUES (101, 'Aarav Patel', '10th', 'Monday: Math, Tuesday: Science, Wednesday: English', 1)

INTO stud340 VALUES (102, 'Mira Singh', '11th', 'Monday: History, Tuesday: Physics, Wednesday: Chemistry', 2)

INTO stud340 VALUES (103, 'Arjun Sharma', '12th', 'Monday: Biology, Tuesday: Geography, Wednesday: Computer Science', 3)

INTO stud340 VALUES (104, 'Isha Gupta', '9th', 'Monday: Social Studies, Tuesday: Mathematics, Wednesday: Physical Education', 4)

INTO stud340 VALUES (105, 'Rohan Verma', '10th', 'Monday: English, Tuesday: Chemistry, Wednesday: Physics', 5)

SELECT \* FROM dual;

create or replace procedure p11(ps in varchar2) is

cursor c11 is

select stud340.rno,sname,class from lab340,stud340 where lab340.lno=stud340.lno and ps = lab340.lname;

begin

for i in c11

loop

dbms\_output.put\_line(i.rno||' '||i.sname||' '||i.class);

end loop;

end;

begin

p11(:ps);

end;

**================================================================================**

**S24-**

CREATE TABLE lab340(

lno NUMBER(3) PRIMARY KEY,

lname VARCHAR2(50),

cap NUMBER(5) NOT NULL,

equipment VARCHAR2(100)

);

INSERT ALL

INTO lab340 VALUES (1, 'Chemistry Lab', 30, 'Bunsen burners, Beakers, Test tubes')

INTO lab340 VALUES (2, 'Physics Lab', 25, 'Optical benches, Pulleys, Pendulums')

INTO lab340 VALUES (3, 'Computer Lab', 20, 'Computers, Projectors, Whiteboards')

INTO lab340 VALUES (4, 'Biology Lab', 35, 'Microscopes, Specimens, Petri dishes')

INTO lab340 VALUES (5, 'Math Lab', 15, 'Geometric shapes, Calculators, Graph paper')

SELECT \* FROM dual;

CREATE TABLE stud340(

rno NUMBER(5) PRIMARY KEY,

sname VARCHAR2(50),

class VARCHAR2(20),

timetable VARCHAR2(100),

lno NUMBER(3) REFERENCES lab340(lno) ON DELETE CASCADE

);

INSERT ALL

INTO stud340 VALUES (101, 'Aarav Patel', '10th', 'Monday: Math, Tuesday: Science, Wednesday: English', 1)

INTO stud340 VALUES (102, 'Mira Singh', '11th', 'Monday: History, Tuesday: Physics, Wednesday: Chemistry', 2)

INTO stud340 VALUES (103, 'Arjun Sharma', '12th', 'Monday: Biology, Tuesday: Geography, Wednesday: Computer Science', 3)

INTO stud340 VALUES (104, 'Isha Gupta', '9th', 'Monday: Social Studies, Tuesday: Mathematics, Wednesday: Physical Education', 4)

INTO stud340 VALUES (105, 'Rohan Verma', '10th', 'Monday: English, Tuesday: Chemistry, Wednesday: Physics', 5)

SELECT \* FROM dual;

CREATE OR REPLACE TRIGGER t24

BEFORE DELETE ON lab340

FOR EACH ROW

BEGIN

RAISE\_APPLICATION\_ERROR(-20024, 'Deletion not allowed on Lab table');

END;

DELETE FROM lab340 WHERE lno=1;

**================================================================================**

**25**

create table gym34(

gid number(3) primary key,

name varchar2(25),

city varchar2(15),

charges number(7)check(charges>0),

scheme varchar2(15)

);

create table mem34(

id number(3) primary key,

mname varchar2(15),

phno number(10),

addr varchar2(15),

gid number(3)references gym34(gid) on delete cascade

);

insert into gym34 values(101,'GYM KATTA','baramati',4000,'power plan');

insert into gym34 values(102,'Baramati GYM','pune',4000,'power plan');

insert into gym34 values(103,'GYM bois','pune',4000,'power plan');

insert into gym34 values(104,'sigma GYM ','baramati',9400,'power plan');

insert into gym34 values(105,'GYM jogin','baramati',9400,'power plan');

insert into mem34 values(1,'rahul',9090987785,'baramati',101);

insert into mem34 values(2,'mangesh',9094987785,'pune',102);

insert into mem34 values(3,'adil',9094987785,'pune',103);

insert into mem34 values(4,'joginder',9094947785,'baramati',104);

insert into mem34 values(5,'suraj',9090987785,'baramati',105);

declare

cursor c11(user gym34.gid%type) is

select gym34.gid,name,mem34.id,addr,mname,phno from gym34,mem34 where gym34.gid=mem34.gid and user = gym34.gid;

begin

for s in c11(:user)

loop

dbms\_output.put\_line(s.gid||' '||s.name||' '||s.mname||' '||s.phno);

end loop;

end;

1)

create or replace procedure p4 is

cursor c4 is

select mem34.id,addr,phno,mname from mem34,gym34 where gym34.city='pimpri';

begin

for i in c4 loop

dbms\_output.put\_line(i.id||' '||i.addr||' '||i.phno||' '||i.mname);

end loop;

end;

begin

p4;

end;

**================================================================================**

**S27**

create table plan34(

pno number(3) primary key,

pname varchar2(15),

nofcall number(3),

frcalltime varchar2(15),

fxamt number(7) check(fxamt>0)

);

create table cust034(

cno number(3) primary key,

cname varchar2(15),

mob number(10),

pno number(3) references plan34(pno) on delete cascade

);

insert into plan34 values(101,'Prepaid dhamaka',100,'1hour',299);

insert into plan34 values(102,'Post dhamaka',100,'1hour',199);

insert into plan34 values(103,'499 pack',100,'1hour',499);

insert into plan34 values(104,'Prepaid bus',100,'1hour',799);

insert into plan34 values(105,'postpaid bus',100,'1hour',999);

insert into cust034 values(1,'rahul',1998998999,101);

insert into cust034 values(2,'manoj',1998958999,102);

insert into cust034 values(3,'ragini',1938998999,103);

insert into cust034 values(4,'purva',1998498999,104);

insert into cust034 values(5,'siddesh',1998998499,105);

Q1)

create or replace procedure p4 is

cursor c4 is

SELECT distinct plan34.pname from plan34,cust034 where plan34.pno = cust034.pno and plan34.pno in (SELECT min(pno) FROM cust034);

begin

for i in c4 loop

dbms\_output.put\_line(i.pname);

end loop;

end;

begin

p4;

end;

q2)

create or replace trigger t027

before insert or update on cust034

for each row

begin

if(length(:new.mob)!=10) then

raise\_application\_error(-20015,'Mobile number should be 10 digit');

end if;

end;

insert into cust034 values(1,'rahul',19998999,101);

**================================================================================**

**S26**

create table dept034(

dno number(3) primary key,

dname varchar2(15),

hod varchar2(15),

loc varchar2(15)

);

create table pr34(

pno number(3) primary key,

pname varchar2(15),

stdate date,

budget number(7),

status VARCHAR2(1) CHECK (status IN ('C', 'I', 'P')),

dno number(3) references dept034(dno) on delete cascade

);

insert into dept034 values(1,'SALES','bharat','baramati');

insert into dept034 values(2,'MANAGEMENT','hardik','baramati');

insert into dept034 values(3,'MARKETING','arnav','baramati');

insert into dept034 values(4,'AUDITING','aditya','baramati');

insert into dept034 values(5,'ACCOUNTING','sidhi','baramati');

insert into pr34 values(101,'sales 2024','1-jan-2023',900000,'P',1);

insert into pr34 values(102,'management 2024','2-jan-2023',900000,'P',2);

insert into pr34 values(103,'marketing 2024','3-jan-2023',900000,'P',3);

insert into pr34 values(104,'audit 2022','1-feb-2023',900000,'C',4);

insert into pr34 values(105,'accounting 2024','1-jan-2023',900000,'P',5);

Q1) create or replace procedure p4 is

cursor c4 is

SELECT hod from dept0304 WHERE

dno = (SELECT dno FROM pr304 GROUP BY dno HAVING COUNT(\*) = ( SELECT MAX(project\_count)FROM (SELECT COUNT(\*) AS project\_count FROM pr304 WHERE status = 'C' ))

);

begin

for i in c4 loop

dbms\_output.put\_line(i.hod);

end loop;

end;

begin

p4;

end;

Q2)

create or replace trigger t26

before insert or update on pr34

for each row

begin

if(:new.budget <=0) then

raise\_application\_error(-20015,'Budget be greater than 0');

end if;

end;

insert into pr34 values(101,'sales 2024','1-jan-2023',0,'P',1);

**================================================================================**

**S28-**

create table bill34(

bno number(3) primary key,

day varchar2(15),

tno number(3),

total number(7)

);

create table menu34(

dno number(3) primary key,

dish varchar2(15),

price number(7) not null

);

create table bm34(

bno number(3) references bill34(bno) on delete cascade,

dno number(3) references menu34(dno) on delete cascade,

qty number(3)

);

insert all

into bill34 values(1,'friday',100,800)

into bill34 values(2,'sunday',101,500)

into bill34 values(3,'monday',102,870)

into bill34 values(4,'tuesday',103,890)

into bill34 values(5,'wednesday',104,300)

select \* from dual;

insert all

into menu34 values(1,'pizza lapinos',750)

into menu34 values(2,'chicken tandori',450)

into menu34 values(3,'dal tadka',750)

into menu34 values(4,'kachori puri',800)

into menu34 values(5,'paneer tikha',250)

select \* from dual;

insert all

into bm34 values(1,1,1)

into bm34 values(2,2,5)

into bm34 values(3,3,2)

into bm34 values(4,4,7)

into bm34 values(5,5,2)

select \* from dual;

**S29**

create table bill34(

bno number(3) primary key,

day varchar2(15),

tno number(3),

total number(7)

);

create table menu34(

dno number(3) primary key,

dish varchar2(15),

price number(7) not null

);

create table bm34(

bno number(3) references bill34(bno) on delete cascade,

dno number(3) references menu34(dno) on delete cascade,

qty number(3)

);

insert all

into bill34 values(1,'friday',100,800)

into bill34 values(2,'sunday',101,500)

into bill34 values(3,'monday',102,870)

into bill34 values(4,'tuesday',103,890)

into bill34 values(5,'wednesday',104,300)

select \* from dual;

insert all

into menu34 values(1,'pizza lapinos',750)

into menu34 values(2,'chicken tandori',450)

into menu34 values(3,'dal tadka',750)

into menu34 values(4,'kachori puri',800)

into menu34 values(5,'paneer tikha',250)

select \* from dual;

insert all

into bm34 values(1,1,1)

into bm34 values(2,2,5)

into bm34 values(3,3,2)

into bm34 values(4,4,7)

into bm34 values(5,5,2)

select \* from dual;

**================================================================================**

**S30** CREATE TABLE lib3400(

lno NUMBER(3) PRIMARY KEY,

lname VARCHAR2(20) NOT NULL,

loc VARCHAR2(20),

libr VARCHAR2(20),

nob NUMBER(7)

);

CREATE TABLE book3400(

nid NUMBER PRIMARY KEY,

bname VARCHAR2(50) NOT NULL,

aname VARCHAR2(50),

price NUMBER NOT NULL,

publication VARCHAR2(50),

Lno NUMBER REFERENCES Lib3400(Lno) on delete cascade

);

INSERT ALL

INTO lib3400 VALUES (1, 'DPU Library', 'Pune', 'Ms. Gupta', 500)

INTO lib3400 VALUES (2, 'City Library', 'baramati', 'Mr. Singh', 300)

INTO lib3400 VALUES (3, 'Town Library', 'TownAB', 'Ms. Patel', 200)

INTO lib3400 VALUES (4, 'University Library', 'University Campus', 'Dr. Kumar', 700)

INTO lib3400 VALUES (5, 'Public Library', 'pune', 'Mr. Sharma', 400)

SELECT \* FROM dual;

INSERT ALL

INTO book3400 VALUES (101, 'Introduction to SQL', 'Mr. Patil', 25.50, 'XYZ Publications', 1)

INTO book3400 VALUES (102, 'Data Structures in C', 'Mr. Singh', 30.00, 'ABC Publishers', 2)

INTO book3400 VALUES (103, 'Java Programming', 'Ms. Gupta', 20.00, 'XYZ Publications', 1)

INTO book3400 VALUES (104, 'Python for Beginners', 'Mr. Patil', 18.75, 'XYZ Publications', 1)

INTO book3400 VALUES (105, 'Algorithms and Complexity', 'Ms. Patel', 35.50, 'ABC Publishers', 3)

SELECT \* FROM dual;

create or replace procedure p4 is

cursor c4 is

select book3400.nid,bname from book3400,lib3400 where lib3400.lno = book3400.lno and aname='Mr. Patil' and lname='DPU Library';

begin

for i in c4 loop

dbms\_output.put\_line(i.nid||' '||i.bname);

end loop;

end;

begin

p4;

end;

**q2)** **create or replace trigger t30**

**before insert or update on book3400**

**for each row**

**begin**

**if(:new.price<=0) then**

**raise\_application\_error(-20015,'Mobile number should be 10 digit');**

**end if;**

**end;**

**insert INTO book3400 VALUES (109, 'Introduction to SQL', 'Mr. Patil', 0, 'XYZ Publications', 1)**

**29-**

CREATE TABLE emp34(

eid NUMBER PRIMARY KEY,

ename VARCHAR2(50) NOT NULL,

addr VARCHAR2(100)

);

CREATE TABLE inv34(

ino NUMBER PRIMARY KEY,

iname VARCHAR2(50) NOT NULL,

idate DATE,

iamt NUMBER CHECK (iamt> 0),

eid NUMBER REFERENCES emp34(eid)

);

INSERT ALL

INTO emp34 VALUES (1, 'Ravi Kumar', '123 Main Street, City A')

INTO emp34 VALUES (2, 'Priya Sharma', '456 Oak Road, City B')

INTO emp34 VALUES (3, 'Amit Singh', '789 Pine Avenue, City C')

INTO emp34 VALUES (4, 'Neha Patel', '101 Cedar Boulevard, City D')

INTO emp34 VALUES (5, 'Kunal Sharma', '202 Maple Lane, City E')

SELECT \* FROM dual;

INSERT ALL

INTO inv34 VALUES (101, 'शेयर्स', '1-feb-2014',75000, 1)

INTO inv34 VALUES (102, 'mutual fund','1-mar-2014' ,60000, 2)

INTO inv34 VALUES (103, 'FD','1-jan-2014',80000, 3)

INTO inv34 VALUES (104, 'Gold', '8-feb-2014',55000, 4)

INTO inv34 VALUES (105, 'Real Estate','19-feb-2014',70000, 5)

SELECT \* FROM dual;

**create or replace trigger t29**

**before insert or update on inv34000**

**for each row**

**begin**

**if(:new.iamt<50000) then**

**raise\_application\_error(-20015,'Amount should be Greater than 50000');**

**end if;**

**end;**