TRIGGERS

========

1)INCREASE THE PHONENO WHENEVER THE DETAILS ARE UPDATED ON TABLE.

SQL> CREATE OR REPLACE TRIGGER USE1

```
 2  BEFORE UPDATE ON USER1

 3  FOR EACH ROW

 4  BEGIN

 5    :NEW.PHONENO := :OLD.PHONENO+10;

 6  END;

 7  /
```

Trigger created.

UPDATE USER1 SET PHONENO=9876543210 WHERE USERID=301;

1 row updated.

SELECT * FROM USER1;

USERID	NAME	PHONENO	MAIL	ADHAARID	LICENCENO	TID	ADDRESS
301	SRI	9087654320	sri@gmail.com	2838501	34678262	102	MADURAI
302	BALA	9098754321	bala@gmail.com	6578432	45367892	105	SALEM
303	SURESH	9098751231	suresh@gmail.com	4587234	23676459	104	KARUR
355	ABI	9800003217	abi@gmail.com	2815099	67312653	109	DPI
370	VICKY	9990003217	vicky@gmail.com	2815067	54231755	108	HARUR
330	PRABU	9991103217	prabu@gmail.com	2812367	87242751	107	CHENNAI

2)DISPLAY THE CVV OF ALL CID WHERE CVV>100000.

```
CREATE OR REPLACE TRIGGER CRED
 2  AFTER UPDATE ON CREDITCARD
 3  FOR EACH ROW
 4  WHEN(NEW.CVV>100000)
 5  BEGIN
 6    DBMS_OUTPUT.PUT_LINE('OLD.CVV:' || :OLD.CVV);
 7      DBMS_OUTPUT.PUT_LINE('NEW.CVV:' || :NEW.CVV);
 8  END;
 9  /
Trigger created.
```

UPDATE CREDITCARD SET CVV=100001 WHERE USERID=370;

OLD.CVV:22253

NEW.CVV:100001

SQL> SELECT CID,CVV FROM CREDITCARD;

```
     CID       CVV
---------- ----------
  291726    100001
   29139     65453
     311     50000
   29000     11000
   29780    100001
   11780     88253
```

3)DISPLAY A MESSAGE IF AMOUNT IS HIGHER THAN THE OLDER.

```
  CREATE OR REPLACE TRIGGER AMT

 2  BEFORE UPDATE OF AMOUNT ON GIFTCARD

 3  FOR EACH ROW

 4  BEGIN

 5    IF(:NEW.AMOUNT>:OLD.AMOUNT)THEN

 6    DBMS_OUTPUT.PUT_LINE('HIGHER THAN OLDER COST');

 7  END IF;

 8  END;

 9  /
```

Trigger created.

```
 UPDATE GIFTCARD SET AMOUNT=AMOUNT+20 WHERE USERID=355;
```

HIGHER THAN OLDER COST

1 row updated.

SQL> SELECT GID,AMOUNT FROM GIFTCARD;

```
    GID    AMOUNT
---------- ----------
    555    242020
    560    330000
    505    275000
    515    385000
    500    550000
```

4)RAISE APPLICATION ERROR IF USER PHONENO IS NULL.

SQL> CREATE OR REPLACE TRIGGER PHON1

 2   BEFORE INSERT ON USER1

```
3  FOR EACH ROW

4   BEGIN

5    IF(:NEW.PHONENO IS NULL) THEN

6        RAISE_APPLICATION_ERROR(-20004,'PHONE NO IS EMPTY');

7    END IF;

8  END;

9  /
```

Trigger created.

```
SQL> INSERT INTO USER1 (USERID,NAME,MAIL) VALUES(900,'HARI','hari@gmail.com');

 INSERT INTO USER1 (USERID,NAME,MAIL) VALUES(900,'HARI','hari@gmail.com');

INSERT INTO USER1 (USERID,NAME,MAIL) VALUES(900,'HARI','hari@gmail.com')

        *
ERROR at line 1:

ORA-20004: PHONE NO IS EMPTY

ORA-06512: at "C##21BCS048.PHON1", line 3

ORA-04088: error during execution of trigger 'C##21BCS048.PHON1'
```

5)CREATE A TRIGGER TO INSERT INTO A SENIOR USER TABLE WHEN NEW DETAILS INSERTED IN ORIGINAL TABLE.

```
 CREATE TABLE USERBACK (USERID INTEGER,NAME VARCHAR(20),ADDRESS VARCHAR(30),PHONENO INT );
```

Table created.

```
 CREATE TRIGGER BACK

 2  AFTER INSERT ON USER1

 3  FOR EACH ROW

 4   BEGIN
```

```
  5    INSERT INTO
USERBACK(USERID,NAME,ADDRESS,PHONENO)VALUES(:NEW.USERID,:NEW.NAME,:NEW.ADDRESS,:N
EW.PHONENO);

  6   END;

  7  /
```

Trigger created.

```
SQL> INSERT INTO USER1
VALUES(333,'KARTHI',9000011223,'karthi@gmail.com',NULL,NULL,NULL,'CHENNAI');
```

1 row created.

SQL> SELECT * FROM USERBACK;

```
   USERID NAME              ADDRESS                        PHONENO

---------- ------------------- ----------------------------- ----------

     333 KARTHI          CHENNAI                9000011223
```

5)DELETE USING TRIGGER.

```
 CREATE TRIGGER AMOT2
  2   AFTER DELETE ON GIFTCARD
  3   FOR EACH ROW
  4  WHEN(NEW.AMOUNT<30000)
  5  BEGIN
  6    DELETE FROM GIFTCARD WHERE AMOUNT<30000;
  7    DBMS_OUTPUT.PUT_LINE('DELETED');
  8  END;
  9  /
```

Trigger created.

6)IF NEWLY INSERTED RECORD IN GIFTCARD HAS NULL OF AMOUNT THEN ADD THE CURRENT DATE.

```
SQL> CREATE OR REPLACE TRIGGER DATT
  2  BEFORE INSERT ON GIFTCARD
  3  FOR EACH ROW
  4  DECLARE
  5    TEMP DATE;
  6
  7  BEGIN
  8    SELECT SYSDATE INTO TEMP FROM DUAL;
  9    IF :NEW.GVALID IS NULL THEN
 10        :NEW.GVALID:=TEMP;
 11    END IF;
 12  END;
 13  /
```

Trigger created.

INSERT INTO GIFTCARD (GID,USERID,AMOUNT) VALUES(522,370,40000);

SQL> SELECT * FROM GIFTCARD;

```
     GID    USERID    AMOUNT GVALID
---------- ---------- ---------- ---------
     570     301      5000 07-FEB-30
     522     370     40000 07-MAY-23
     590     303      8000 04-APR-30
     500     333     80000 10-MAY-90
     555     355    242020 01-MAR-70
```

```
560     330    330000 03-APR-90

505     302    275000 08-JAN-44
```

6)RAISE APPLICATION ERROR IF USER ADDRESS IS NULL.

```
 CREATE OR REPLACE TRIGGER USERADDRESS

 2   BEFORE INSERT ON USER1

 3   FOR EACH ROW

 4   BEGIN

 5    IF(:NEW.ADDRESS IS NULL)THEN

 6     RAISE_APPLICATION_ERROR(-20004,'ADDRESS IS EMPTY');

 7    END IF;

 8   END;

 9  /
```

Trigger created.

```
 INSERT INTO USER1 (USERID,NAME,PHONENO) VALUES(344,'SENTHIL',8765432100);

INSERT INTO USER1 (USERID,NAME,PHONENO) VALUES(344,'SENTHIL',8765432100)

      *

ERROR at line 1:

ORA-20004: ADDRESS IS EMPTY

ORA-06512: at "C##21BCS048.USERADDRESS", line 3

ORA-04088: error during execution of trigger 'C##21BCS048.USERADDRESS'
```

7)INSTEAD OF IN TRIGGER.

```
SQL> CREATE TRIGGER UPDATE_GIF

 2    INSTEAD OF UPDATE ON GVIEW2

 3   FOR EACH ROW
```

```
 4  BEGIN

 5    UPDATE GIFTCARD SET AMOUNT=:NEW.AMOUNT WHERE USERID=:NEW.USERID;

 6  END;

 7  /
```

Trigger created.

SQL> UPDATE GVIEW2 SET AMOUNT=20000 WHERE USERID=301;

1 row updated.

SQL> SELECT * FROM GIFTCARD;

```
   GID    USERID    AMOUNT GVALID
---------- ---------- ---------- ---------
   570     301    20000 07-FEB-30

   590     303     8000 04-APR-30

   540     303    70987 09-MAY-80

   548     355    34987 07-JAN-50

   530     370    38887 04-DEC-90
```