## **Customer\_name :**

create table customer\_name(cid varchar(20),cname varchar(25),

constraint cnst\_cust\_nm\_cid\_pk primary key(cid));

## **Customer\_contact :**

create table customer\_cnt(cid varchar(20),ccontactNo number(10),

constraint cnst\_cnt\_cid\_fk foreign key(cid) references customer\_name on delete cascade,

constraint cnst\_cust\_cnt\_cid\_pk primary key(cid));

Alter table customer\_cnt add constraint cnst\_cnt\_cid\_fk foreign key(cid) references customer\_name on delete cascade;

## **Service :**

create table service(sid varchar(20),sdetails varchar(50),

constraint cnst\_srvc\_sid\_pk primary key(sid));

on delete cascade

## **Customer gives for Service :**

create table customer\_gives\_for\_service(cid varchar(20),sid varchar(20),cproblem varchar(500),given\_date date,collection\_date date,

constraint cnst\_custGvFrSr\_cid\_fk foreign key(cid) references customer\_name on delete cascade,

constraint cnst\_custGvFrSr\_sid\_fk foreign key(sid) references service on delete cascade,

constraint cnst\_custGvFrSr\_pk primary key(cid,sid));

## **Transaction :**

create table transaction(tid varchar(20),cid varchar(20),sid varchar(20),tdate date,amount number(12,2),

constraint cnst\_tra\_cid\_fk foreign key(cid) references customer\_name on delete cascade

,

constraint cnst\_tra\_sid\_fk foreign key(sid) references service on delete cascade

,

constraint cnst\_tra\_pk primary key(cid,sid,tid));

## 

## **Staff :**

create table staff(st\_id varchar(20),st\_name varchar(30),st\_salary number(20),st\_des varchar(20),

constraint cnst\_staff\_pk primary key(st\_id));

## **Hardware :**

create table hardware(hid varchar(20),hname varchar(30),hcost number(12,2),hdetails varchar(500),

constraint cnst\_hwd\_pk primary key(hid));

## **Service given by Staff :**

create table service\_given\_by\_staff(sid varchar(20),st\_id varchar(20),

constraint cnst\_srvGvnByStf\_sid\_fk foreign key(sid) references service on delete cascade

,

constraint cnst\_srvGvnByStf\_st\_id\_fk foreign key(sid) references staff

,

constraint cnst\_srvGvnByStf\_pk primary key(sid,st\_id));

## **Service Staff Hardware:**

create table service\_staff\_hardware(sid varchar(20),st\_id varchar(20),hid varchar(20),

constraint cnst\_srvStfHwd\_sid\_fk foreign key(sid) references service on delete cascade,

constraint cnst\_srvStfHwd\_st\_id\_fk foreign key(sid) references staff on delete cascade,

constraint cnst\_srvStfHwd\_hid\_fk foreign key(hid) references hardware on delete cascade,

constraint cnst\_srvStfHwd\_pk primary key(sid,st\_id,hid));

## **Altering :**

alter table transaction modify amount number(12,2);

alter table hardware rename column hdetails to hcount;

alter table hardware rename column hname to hdetails;

alter table hardware modify hdetails varchar(500);

alter table hardware modify hcount number(10);

create or replace trigger toDel

before delete on staff

for each row

begin

delete from service\_staff\_hardware where st\_id=:old.st\_id;

End;

CREATE OR REPLACE TRIGGER trg\_check\_collection\_date

BEFORE INSERT OR UPDATE ON table1

FOR EACH ROW

BEGIN

IF( :new.collection\_date < SYSDATE )

THEN

RAISE\_APPLICATION\_ERROR( -20001,

'Invalid Collection Date: Collection Date must be greater than todays date');

END IF;

END;

**Procedure for calculating the total amount of given customer id:**

CREATE OR REPLACE PROCEDURE proc(c IN VARCHAR,sum out int)

is

BEGIN

SELECT SUM(amount) into sum from transaction where cid=c group by cid;

END;