**Payment:**

payBill(accountNo in number, paymentAmt in number, payMethod in number)

*Algorithm:* Check if the account exists.

The procedure takes the input parameters required for bill payment and **record is added into the ‘payment\_history’** table.

**Account balance in ‘account’ table will be updated** to reflect the current balance.

**Message will be inserted into ‘message’** table stating the payment to the account has been done.

*Input:* 1) accountNo

2) paymentAmt

3) payMethod

*Output:* Message will be displayed stating the payment has been done.

CREATE OR REPLACE PROCEDURE payBill (accountNo IN payment\_history.aid%type, paymentAmt IN payment\_history.payment\_amount%type) IS

v\_account\_balance account.account\_balance%type;

v\_status account.status%type;

pending\_amt account.account\_balance%type;

v\_previous\_balance monthly\_bill.previous\_balance%type;

BEGIN

SELECT UPPER(status),account\_balance

INTO v\_status,v\_account\_balance

FROM account

WHERE aid = accountNo;

/\*Check if account exists and service is started for the account. Account which is inactive may need to make last payment.\*/

IF v\_status = 'ACTIVE' THEN

GOTO continue\_exec;

ELSIF v\_status = 'INACTIVE' AND v\_account\_balance = 0 THEN

dbms\_output.put\_line('All payments to the account has been done and is Inactive.');

GOTO end\_of\_procedure;

ELSIF V\_Status Is Null Then

dbms\_output.put\_line('Service on house with Account No. ' ||accountNo|| ' has not begun.');

GOTO end\_of\_procedure;

END IF;

<<continue\_exec>>

/\*Procedure doenot allow payment of more than account balance.\*/

If (Paymentamt > V\_Account\_Balance) THEN

dbms\_output.put\_line('Kindly make a payment of less than or equal to account balance '||v\_account\_balance );

GOTO end\_of\_procedure;

END IF;

INSERT INTO payment\_history VALUES (seq\_payment\_history.nextVal,accountNo,paymentAmt,sysdate);

UPDATE account SET account\_balance = account\_balance - paymentAmt WHERE aid = accountNo;

dbms\_output.put\_line('Payment of amount '||paymentAmt||' for account No. '|| accountNo|| ' has been done');

--Display balance amount

pending\_amt := v\_account\_balance - paymentAmt;

IF pending\_amt > 0 THEN

dbms\_output.put\_line('Pending balance for the account No. '|| accountNo || ' is '|| pending\_amt);

END IF;

-- Message inserted

INSERT INTO message VALUES(message\_id\_seq.nextVal,accountNo,'Payment to the account has been done',systimestamp);

<<end\_of\_procedure>>

dbms\_output.put\_line('');

EXCEPTION

when no\_data\_found then dbms\_output.put\_line('Data for the speficied account doesnot exists');

when too\_many\_rows then dbms\_output.put\_line('Too many rows');

when others then dbms\_output.put\_line('Error in data.');

END;