**Report service problem:**

reportProblem(accountNo in number, problemDesc in varchar2, reportDate in date , ticketId out number)

*Algorithm:* Check if the account exists.

This procedure will register an issue with the system with account number and problem description thereby making an entry into **‘service\_problem’** table and status is set to ‘in progress’.

Problem **registration number/ticket id is then displayed** to show that the issue is reported.

**Message** table is updated to state that the problem is reported.

*Input:*   1) accountNo

2) problemDesc

3) reportDate

*Output:* Message displaying the ticketId will be generated and stored in the table.

-- This procedure takes account id(a\_id),problem category(problemCategory),problem description(problemDesc) as inputs and generates a ticket\_id(ticket\_id).

Create or replace PROCEDURE report\_serviceProblem (a\_id in INTEGER, problemCategory in Varchar,problemDesc in varchar,ticket\_ID out number)

IS

/\* It will loop through the account table to find an account number that matches the input from the user with an active account status \*/

cursor c1 is select aid from account where a\_id = aid and status = 'Active';

account\_id account.aid%type;

BEGIN

open c1;

loop

-- Fetch the finding into a local variable

fetch c1 into account\_id;

exit when c1%NOTFOUND;

-- Insert statements to message and service\_problem table

Insert Into Service\_problem Values (service\_problem\_seq.nextval,a\_id,'in progress',problemCategory, problemDesc,sysdate,null,null);

/\*we will save the generated ticket\_id to be displayed to the user later \*/

ticket\_id := service\_problem\_seq.currval;

Insert Into Message Values (message\_id\_seq.nextval ,a\_id,'Issue has  been reported',sysdate);

end loop;

close c1;

end;

/\* For an account number that exists but does not have an active status/or an account number that does not exist \*/

Set Serveroutput on;

Declare

new\_ticket number;

Begin

report\_serviceProblem(8,'Heating and Air Conditioning Services','The heater in my house is not working.It is freezing!',new\_ticket);

/\* If the procedure returns a new\_ticket,then the account exists and we will generate the corresponding ticket id but if it does not return a new\_ticket,it means the account does not exist. \*/

if new\_ticket > 0 then

Dbms\_output.put\_line('The new ticket id is: ' || new\_ticket);

else

dbms\_output.put\_line('This account does not exist');

end if;

End;

-- If account exists and is in an active status

Set Serveroutput on;

Declare

new\_ticket number;

Begin

report\_serviceProblem(3,'Heating and Air Conditioning Services','The heater in my house is not working.It is freezing!',new\_ticket);

if new\_ticket > 0 then

Dbms\_output.put\_line('The new ticket id is: ' || new\_ticket);

else

dbms\_output.put\_line('This account does not exist');

end if;

End;