Features for user registration:

1) Register an account with the system. The user needs to provide name, phone#, email, password, and type of user (faculty, staff, or student). The procedure should check whether the email already exists in user table. If so, please print a message saying the account exists. Otherwise create an account with input values and return a new user ID.

Comment-It checks whether email exists in user table and if exists it displays output 'Account already
exists'.

```
create or replace procedure Register_User(name in varchar, phone in varchar,email in varchar,
pwd in varchar, usid in integer) IS
Count_num integer;
Begin
Select count(*) into count_num from usertable where uemail=email;
If(count_num<=0)then
Insert into usertable values(new_user_id.nextval,name,phone,email,pwd,usid);
Dbms_output.put_line('New user ID is ' || new_user_id.currval );
 Else
Dbms_output.put_line('Account already exists');
end if;
End;
```

Test case 1: No existing email duplicate.
```
set serveroutput on;
declare
begin
Register_User('Master', '410-330-4411','master@gmail.com', '1234', 1);
end;
```
The new record has been created as:

11	50	Master	410-330-4411		master@gmail.com	1234	1

Test case 2: Duplicate email.
```
set serveroutput on;
declare
begin
Register_User('Master', '410-330-4411','master@gmail.com', '1234', 1);
end;
```
Get the error result as:

```
PL/SQL procedure successfully completed.

Account already exists
```

2) Allow a user to login by providing user id and password. Please check whether user id exists and password matches. If not, please print a message to indicate the error. Otherwise print a message to indicate user has logged on. The procedure should return a value 1 for success login and 0 for unsuccessful log in.

Comment-It allows user to login by user id and password, if already exists it prints 'invalid username and password'.If no data is found it prints 'The record does not exist'.For too many rows it returns 'Too many records returned'. It returns 1 for successful login and 0 for unsuccessful.

```
create or replace function UserLoginCheck(user_id int, upwd varchar) return number
IS
id_count number;
begin
select count(*) into id_count from usertable where userid = user_id and upw=upwd;
If id_count>=1 then
dbms_output.put_line('User has logged on');
return 1;
else
dbms_output.put_line('Invalid Username or Password');
return 0;
end if;
exception
when no_data_found then
dbms_output.put_line('The record does not exist');
return -1;
when too_many_rows then
dbms_output.put_line('Too many records returned');
return -1;
end;
```

Test case 1: Login with correct password
```
declare
id_count number;
begin
id_count:= UserLoginCheck(1,'password');
if id_count is not null then
dbms_output.put_line(id_count);
end if;
end;
```

The message shows that the user login to the system.
Return 1 means login successfully.

```
User has logged on
1
```

Test case 2: Login id but incorrect password.
id_count:= UserLoginCheck(1,'password1');
Then the error message has been shown as:

```
Invalid Username or Password
0
```

3. Allow a user to read messages providing user id.
<u>**Comment**</u>-It allows user to read messages by providing user id.

```
create or replace procedure ReadMessage(user_id in int) IS
cursor c1 is Select message,mtime from message where userid=user_id;
r message%rowtype;
a_userid usertable.userid%type;
begin
select userid into a_userid from usertable where userid=user_id;
if user_id=a_userid then
for r in c1 loop
dbms_output.put_line('Following are the messages:= '||r.message||' At Time '|| r.mtime);
end loop;
end if;
exception when no_data_found then
dbms_output.put_line('User Does not exist');
end;
```

Test case 1: list all message from existing user id 1
exec ReadMessage(1);
Get the result from the message table as below

```
PL/SQL procedure successfully completed.

Following are the messages:= You have been regiestered for Mobile app festival event. At Time 15-APR-16 10.00.30.000000 PM
Following are the messages:= You have been regiestered for Free food event. At Time 15-APR-16 11.00.30.000000 PM
```

Test case 2: Input the wrong user id.
exec ReadMessage(23);
Get the error:

```
PL/SQL procedure successfully completed.

User Does not exist
```