

* Table space = Logical container when you organise your database objects

User Admin

```
CREATE TABLESPACE MSIA643_ts  
DATAFILE 'tbs_IA643.dat' SIZE 500K REUSE  
AUTOEXTEND ON NEXT 500K MAXSIZE 100M;
```

```
Create USER JDoe IDENTIFIED BY hispwd  
DEFAULT TABLESPACE MSIA643_ts  
QUOTA 200K ON MSIA643_ts  
TEMPORARY TABLESPACE TEMP  
PROFILE STUD_PROF  
ACCOUNT UNLOCK; — Project learn unlock
```

* When using your own table space, your own profile make sure you create them by u create the user.

```
GRANT CONNECT, RESOURCE TO JDoe;
```

Profile Example

```
Drop Profile stud_prof;
CREATE PROFILE Stud_PROF LIMIT
  SESSIONS_PER_USER      UNLIMITED
  CPU_PER_SESSION        UNLIMITED
  CPU_PER_CALL            3000
  CONNECT_TIME            120
  LOGICAL_READS_PER_SESSION DEFAULT
  LOGICAL_READS_PER_CALL  1000
  PRIVATE_SGA             15K
  COMPOSITE_LIMIT         5000000
  FAILED_LOGIN_ATTEMPTS 5
  PASSWORD_LIFE_TIME 100
  PASSWORD_REUSE_TIME 30
  PASSWORD_REUSE_MAX 3
  PASSWORD_LOCK_TIME 1
  PASSWORD_GRACE_TIME 3
  PASSWORD_VERIFY_FUNCTION Ex_pwd_verify;
```

Password Verification Function

```
CREATE OR REPLACE FUNCTION Ex_pwd_verify (P_userid varchar2, P_password varchar2,  
      P_old_password varchar2)  
RETURN BOOLEAN IS
```

```
PWD_STR VARCHAR2(255);
```

```
BEGIN
```

```
PWD_STR := UPPER(P_password);
```

```
IF LENGTH(PWD_STR) < 8 THEN  
    RETURN FALSE;  
END IF;
```

```
FOR i IN 1..LENGTH(PWD_STR) LOOP
```

```
    IF INSTR('~!@#$$%^&*', SUBSTR(PWD_STR, i,1)) > 0 THEN  
        RETURN TRUE;  
    END IF;  
END LOOP;
```

```
RETURN FALSE;  
END;  
/
```

Test Step 1

Set serveroutput on;
set define off;

BEGIN

if

Ex_pwd_verify('dba643','yuui2pemmrlf','rt5677') then

dbms_output.put_Line('True');

else

dbms_output.Put_line('False');

end if;

END;

/

Test Step 2

- Create the function in SYS account
- Logon as dba643
ALTER USER JDOE PROFILE Stud_Prof;
- Logon as JDOE

ALTER USER Jdoe IDENTIFIED BY
"newpwd" REPLACE "oldpwd";



Role Example

Assume you are managing multiple levels of users

- Administrators
- Developers
- End users/ Vendors/ Customers/ Viewers
 - ▢ Mangers
 - ▢ Clerks

Role – cont'd

- `CREATE ROLE cust_serv_clerk;`
- `GRANT select on customers to cust_serv_clerk;`
- `GRANT select, insert, update on issue_track to cust_serv_clerk;`
- `GRANT cust_serv_clerk to bob;`

Role – cont'd

- CREATE ROLE cust_serv_mgr;
- GRANT cust_serv_clerk to cust_serv_mgr;
- GRANT insert, update, delete on customers to cust_serv_mgr;
- GRANT delete on issue_track to cust_serv_mgr;
- GRANT cust_serv_mgr to mary;