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Section: B

Class Test 09

1. Create the tables given below with all given specifications and insert the given data in the created tables. Use sequences to create primary key values. Create one index for each table manually. Both tables must have a synonymous name.

D_ID	D_NAME
1	CS
2	EEE
3	BBA
4	LAW
5	ENGLISH

Table: Department

T_ID	T_NAME	SKILL	D_ID
11	Sam	C	1
22	Sheldon	Finance	3
33	Oliver	Circuits	2
44	Emma	Criminology	4
55	Harry	Poetry	5

Table: Teacher

2. There are 3 roles in this database i.e. Director, Head and Teacher. The role Director has access to all tables and has the credentials to all system and object privileges. Sam (Password: dean) is the Director. The role Head can only update and see all data. Sheldon(Password: amy) is the Head. The role Teacher can only see all data. Oliver(Password: twist), Emma (Password: henry) and Harry (Password: ginny) are all teachers.
3. Create a complex view that displays the employee name and the name of the department they work in.

Hints:

1. From System's user account create all the users and roles
2. From Director's user account perform all DDL and DML operations for the tables Department and Teacher

```
1) create table Department (  
D_ID int, D_NAME varchar(255)  
);
```

```
INSERT INTO Department (D_NAME)  
VALUES ('CS');
```

```
INSERT INTO Department (D_NAME)  
VALUES ('EEE');
```

```
INSERT INTO Department (D_NAME)
VALUES ('BBA');
```

```
INSERT INTO Department (D_NAME)
VALUES ('LAW');
```

```
INSERT INTO Department (D_NAME)
VALUES ('ENGLISH');
```

```
create table Teacher (
T_ID int, T_NAME varchar(255), SKILL varchar(255), D_ID int
);
```

```
INSERT INTO Teacher (T_NAME, SKILL)
VALUES ('Sam','C');
```

```
INSERT INTO Teacher (T_NAME, SKILL)
VALUES ('Sheldon','Finance');
```

```
INSERT INTO Teacher (T_NAME, SKILL)
VALUES ('Oliver','Circuits');
```

```
INSERT INTO Teacher (T_NAME, SKILL)
VALUES ('Emma','Criminology');
```

```
INSERT INTO Teacher (T_NAME, SKILL)
VALUES ('Harry','Poetry');
```

```
create sequence D_ID
increment by 1
start with 1
MAXVALUE 1000
NOCACHE
NOCYCLE;
```

```
create sequence T_ID
increment by 11
start with 11
MAXVALUE 1000
NOCACHE
NOCYCLE;
```

```
CREATE INDEX D_INDEX  
on Department (D_NAME);
```

```
CREATE INDEX T_INDEX  
on Teacher (T_NAME, SKILL);
```

```
CREATE SYNONYM D_SYN  
FOR Department;
```

```
CREATE SYNONYM T_SYN  
FOR Teacher;
```

```
3) CREATE VIEW D_VIEW  
AS SELECT Teacher.T_NAME, Department.D_Name  
FROM Teacher, Department  
WHERE Department.D_ID = Teacher.T_ID;
```