Week 2 Assignment

Database(SQL):

2,3 :

pjppractice-# \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-------------+----------+----------+----------------------------+----------------------------+-----------------------

pjppractice | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 |

postgres | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 |

template0 | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

5,6:

pjppractice-# \dt+

List of relations

Schema | Name | Type | Owner | Size | Description

--------+------+-------+----------+---------+-------------

public | test | table | postgres | 0 bytes |

(1 row)

i :

pjppractice=# alter table test add lname character(30);

ALTER TABLE

pjppractice=# select \* from test;

id | fname | lname

----+-------+-------

(0 rows)

ii :

pjppractice=# alter table test rename column lname to last\_name;

ALTER TABLE

pjppractice=# select \* from test;

id | fname | last\_name

----+-------+-----------

(0 rows)

iii :

pjppractice=# alter table test add primary key (id);

ALTER TABLE

pjppractice=# select \* from test;

id | fname | last\_name

----+-------+-----------

(0 rows)

iv :

pjppractice=# alter table test drop column last\_name;

ALTER TABLE

pjppractice=# select \* from test;

id | fname

----+-------

(0 rows)

v :

pjppractice=# alter table test rename to test1;

ALTER TABLE

pjppractice=# \dt+

List of relations

Schema | Name | Type | Owner | Size | Description

--------+-------+-------+----------+---------+-------------

public | test1 | table | postgres | 0 bytes |

(1 row)

**Question EFddl, efdml and efques file ….**

**#creating tables**

pjppractice=# CREATE DATABASE EFS\_DB;

CREATE DATABASE

pjppractice=# USE EFS\_DB;

ERROR: syntax error at or near "USE"

LINE 1: USE EFS\_DB;

^

pjppractice=# \c EFS\_DB

FATAL: database "EFS\_DB" does not exist

Previous connection kept

pjppractice=# \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-------------+----------+----------+----------------------------+----------------------------+-----------------------

efs\_db | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 |

pjppractice | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 |

postgres | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 |

template0 | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_United States.1252 | English\_United States.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(5 rows)

pjppractice=# \c efs\_db

You are now connected to database "efs\_db" as user "postgres".

efs\_db=# \dt+

List of relations

Schema | Name | Type | Owner | Size | Description

--------+------------------+-------+----------+---------+-------------

public | batches | table | postgres | 0 bytes |

public | courseandmodules | table | postgres | 0 bytes |

public | courses | table | postgres | 0 bytes |

public | modules | table | postgres | 0 bytes |

public | students | table | postgres | 0 bytes |

public | trainers | table | postgres | 0 bytes |

(6 rows)

**#inserting data**

efs\_db=# select \* from modules;

modulecode | modulename | duration

------------+--------------------+----------

JAV-1 | OOAD | 3

JAV-2 | CORE JAVA | 12

JAV-3 | JUNIT | 3

JAV-4 | SERVLET | 6

JAV-5 | JSP | 7

JAV-6 | STRUTS | 4

JAV-7 | SPRING | 3

WEB-1 | HTML | 4

MS-01 | C SHARP | 14

MS-02 | ADO .NET | 7

MS-03 | WPF | 9

MS-04 | ASP.NET | 12

MS-05 | WCF | 10

MS-06 | COM+ | 10

ORA-1 | SQL | 7

ORA-2 | PLSQL | 10

ORA-3 | DBA | 12

ORA-4 | PERFORMANCE TUNING | 14

ORA-5 | INFORMATICA | 10

ORA-6 | COGNOS | 12

(20 rows)

efs\_db=# select \* from courses;

coursecode | title | fees

------------+----------------------------------------+-------

100 | Certificed Java Programer | 9500

101 | Certificed Java Web Developer | 12500

200 | Oracle Sql Expert | 6500

201 | Oracle Developer | 12000

202 | Oracle DBA | 34500

203 | Oracle Data Ware Housing | 24500

300 | DotNet 4.0 using C Sharp Certification | 8000

301 | Asp .net certification c# | 12000

302 | Microsoft Developer | 30000

303 | Microsoft Enterprise Developer | 20000

(10 rows)

efs\_db=# select \* from courseandmodules;

coursecode | modulecode

------------+------------

100 | JAV-1

100 | JAV-2

100 | JAV-3

101 | JAV-4

101 | JAV-5

101 | WEB-1

200 | ORA-1

201 | ORA-1

201 | ORA-2

202 | ORA-3

202 | ORA-4

203 | ORA-1

203 | ORA-2

203 | ORA-5

203 | ORA-6

(15 rows)

efs\_db=# select \* from trainers;

trainerid | trainername | email

-----------+-------------+----------------------

700 | SAI RAM | sai@galaxy.edu

701 | VENKATESH | venkatesh@galaxy.edu

702 | RAMYA | ramya@galaxy.edu

703 | KRISHNAN | krishnan@galaxy.edu

704 | SIVA | siva@galaxy.edu

705 | MIHINDU | mihindu@galaxy.edu

(6 rows)

efs\_db=# select \* from batches;

batchcode | trainerid | coursecode | startdate | capacity | batchstrength | slotscode

-----------+-----------+------------+------------+----------+---------------+-----------

3001 | 700 | 100 | 2012-01-02 | 6 | 6 | A5

3002 | 704 | 200 | 2011-09-02 | 6 | 6 | A6

3003 | 703 | 303 | 2012-01-02 | 10 | 10 | B1

3004 | 700 | 301 | 2011-03-10 | 5 | 5 | B4

3005 | 703 | 300 | 2011-01-02 | 5 | 5 | B7

3006 | 704 | 100 | 2011-02-02 | 6 | 2 | B2

3007 | 700 | 201 | 2011-01-02 | 10 | 10 | B3

3008 | 700 | 203 | 2011-10-02 | 7 | 7 | A4

3009 | 703 | 202 | 2012-07-09 | 10 | 5 | A2

3010 | 700 | 202 | 2012-05-06 | 10 | 4 | A3

3011 | 700 | 202 | 2012-06-02 | 6 | 8 | B4

(11 rows)

efs\_db=# select \* from students;

studentid | studentname | batchcode | place | phone

-----------+-------------+-----------+---------+------------

1001 | SANKAR | 3001 | CHENNAI | 9373737374

1002 | UMA | 3001 | CHENNAI | 9373737374

1003 | BANU | 3002 | CHENNAI | 9373737364

1004 | BALAN | 3002 | MUMBAI | 9373737874

1005 | HAMEED | 3002 | DELHI | 9373537974

1006 | SOMU | 3003 | CHENNAI | 9143737374

1007 | MAHAL | 3001 | CHENNAI | 9078737373

1008 | AMIR | 3003 | CHENNAI | 8373737374

1009 | VINOTH | 3004 | CHENNAI | 9973737370

1010 | AMIR | 3003 | DELHI | 9573737371

1011 | KUMARAN | 3001 | CHENNAI | 9393737377

1012 | AMIR | 3003 | CHENNAI | 9370737374

1013 | SAI | 3004 | MUMBAI | 9073037376

1014 | JOHN | 3005 | CHENNAI | 9070737374

1015 | JAMMAL | 3005 | CHENNAI | 9670737373

1016 | MOHAMED | 3004 | CHENNAI | 9373737372

1017 | MONISH | 3004 | TRICHY | 9373737374

1018 | BANISH | 3003 | CHENNAI | 9373737374

1019 | DAN | 3002 | CHENNAI | 9373737374

1020 | SANGEETHA | 3001 | MADURAI | 9373737374

1013 | SAI | 3001 | CHENNAI | 9373737374

1001 | SANKAR | 3004 | CHENNAI | 9073037376

(22 rows)

**#efsques.txt**

**1.**

efs\_db=# select modulecode,duration from modules where duration<6;

modulecode | duration

------------+----------

JAV-1 | 3

JAV-3 | 3

JAV-6 | 4

JAV-7 | 3

WEB-1 | 4

(5 rows)

**2.**

efs\_db=# select batchcode,trainerid,coursecode,startdate,capacity,batchstrength from batches where trainerid = 703;

batchcode | trainerid | coursecode | startdate | capacity | batchstrength

-----------+-----------+------------+------------+----------+---------------

3003 | 703 | 303 | 2012-01-02 | 10 | 10

3005 | 703 | 300 | 2011-01-02 | 5 | 5

3009 | 703 | 202 | 2012-07-09 | 10 | 5

(3 rows)

**3.**

efs\_db=# select modulename from modules where modulecode in (select modulecode from courseandmodules where coursecode=100);

modulename

------------

OOAD

CORE JAVA

JUNIT

(3 rows)

**4.**

efs\_db=# select a.coursecode,b.modulename from courseandmodules a LEFT JOIN modules b on a.modulecode=b.modulecode where a.coursecode = 100;

coursecode | modulename

------------+------------

100 | OOAD

100 | CORE JAVA

100 | JUNIT

(3 rows)

**5.**

efs\_db=# select count(b.modulename) as NumberOfModules from courseandmodules a LEFT JOIN modules b on a.modulecode=b.modulecode where a.coursecode = 100;

numberofmodules

-----------------

3

(1 row)

**6.**

efs\_db=# select a.coursecode,count(\*) as NumberOfModules from courseandmodules a LEFT JOIN modules b on a.modulecode=b.modulecode group by a.coursecode ;

coursecode | numberofmodules

------------+-----------------

101 | 3

200 | 1

202 | 2

201 | 2

100 | 3

203 | 4

(6 rows)

**7.**

efs\_db=# select title,fees from courses where fees=(select max(fees) from courses);

title | fees

------------+-------

Oracle DBA | 34500

(1 row)

(Or)

efs\_db=# select title,fees from courses order by fees desc limit 1;

title | fees

------------+-------

Oracle DBA | 34500

(1 row)

**8.**

efs\_db=# select \* from students where batchcode=3001;

studentid | studentname | batchcode | place | phone

-----------+-------------+-----------+---------+------------

1001 | SANKAR | 3001 | CHENNAI | 9373737374

1002 | UMA | 3001 | CHENNAI | 9373737374

1007 | MAHAL | 3001 | CHENNAI | 9078737373

1011 | KUMARAN | 3001 | CHENNAI | 9393737377

1020 | SANGEETHA | 3001 | MADURAI | 9373737374

1013 | SAI | 3001 | CHENNAI | 9373737374

(6 rows)

**9.**

efs\_db=# select \* from students where place='CHENNAI';

studentid | studentname | batchcode | place | phone

-----------+-------------+-----------+---------+------------

1001 | SANKAR | 3001 | CHENNAI | 9373737374

1002 | UMA | 3001 | CHENNAI | 9373737374

1003 | BANU | 3002 | CHENNAI | 9373737364

1006 | SOMU | 3003 | CHENNAI | 9143737374

1007 | MAHAL | 3001 | CHENNAI | 9078737373

1008 | AMIR | 3003 | CHENNAI | 8373737374

1009 | VINOTH | 3004 | CHENNAI | 9973737370

1011 | KUMARAN | 3001 | CHENNAI | 9393737377

1012 | AMIR | 3003 | CHENNAI | 9370737374

1014 | JOHN | 3005 | CHENNAI | 9070737374

1015 | JAMMAL | 3005 | CHENNAI | 9670737373

1016 | MOHAMED | 3004 | CHENNAI | 9373737372

1018 | BANISH | 3003 | CHENNAI | 9373737374

1019 | DAN | 3002 | CHENNAI | 9373737374

1013 | SAI | 3001 | CHENNAI | 9373737374

1001 | SANKAR | 3004 | CHENNAI | 9073037376

(16 rows)

**10.**

efs\_db=# select count(\*) from modules where duration<6;

count

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5

(1 row)