Michael Vu

CSE 3330

Professor Elmasri

Project 1

Due Tuesday, July 25th, 2017

**ITEM 4**

**1)**

SQL> select \* from employee

  2  where LNAME = 'Jones'

  3  UNION

  4  select \* from employee

  5  where LNAME = 'James';

FNAME M LNAME   SSN     BDATE

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

ADDRESS        S     SALARY SUPER\_SSN     DNO

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

Jared D James   111111100 10-OCT-66

123 Peachtr,Atlanta,GA       M      85000       6

John C James   555555500 30-JUN-75

766 Bloomington,Sacramento,CA  M      81000       8

Jon C Jones   111111101 14-NOV-67

111 Allgood,Atlanta,GA       M      45000 111111100       6

FNAME M LNAME   SSN     BDATE

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

ADDRESS        S     SALARY SUPER\_SSN     DNO

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

Megan G Jones   254937381 02-MAR-61

528 Stone CT,Chicago,IL        F      62000 666666600       8

**2)**

SQL> select \* from employee

  2  where FNAME = 'Kim' or FNAME = 'Wilson';

FNAME M LNAME   SSN     BDATE

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

ADDRESS        S     SALARY SUPER\_SSN     DNO

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

Kim C Grace   333333300 23-OCT-70

667 Mills Ave,Sacramento,CA    F      79000       6

Kim G Ted   444222666 15-APR-68

3648 Tree Cir,Austin,TX        M      50000 999999999       9

Wilson A Holmes   242916639 02-JUN-71

21 South Co,Arlington,TX       M      72500 555555500       4

**3)**

SQL> select e.fname, e.lname, e.ssn, SUM(w.hours), COUNT(\*)

  2  from employee e, works\_on w

  3  where e.ssn = w.essn

  4  group by e.fname, e.lname, e.ssn

  5  having COUNT(\*) > 1;

FNAME LNAME SSN   SUM(W.HOURS) COUNT(\*)

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

Wilson Holmes 242916639     25 2

Ahmad Jabbar 987987987     40 2

Johny Smith 122344668     45 3

John Smith 123456789     40 2

Jake Sheen 245239264     50 2

Joyce English 453453453     40 2

Roy Lewallen 999999999     40       13

Erin Maxfield 242535609     40 2

Franklin Wong 333445555     40 4

Red Bacher 666666613     50 3

Jennifer Wallace 987654321     35 2

FNAME LNAME SSN   SUM(W.HOURS) COUNT(\*)

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

Alicia Zelaya 999887777     40 2

12 rows selected.

**4)**

SQL> select d.dname, e.dno, dl.dlocation, SUM(e.salary)

  2  from department d, dept\_locations dl, employee e, works\_on w

  3  where SSN=ESSN AND dl.dnumber = d.dnumber

  4  group by d.dname, e.dno, dl.dlocation;

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Administration 9 Stafford   447500

HR 6 Arlington   810000

Hardware 6 Milwaukee   810000

Headquarters 6 Houston   810000

Headquarters 7 Houston   949500

Headquarters 9 Houston   447500

Headquarters 5 Houston   521500

Headquarters 8 Houston 1767000

QA 4 Austin   496000

QA 5 Austin   521500

Research 4 Bellaire   496000

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Research 9 Houston   447500

Research 5 Houston   521500

Research 5 Bellaire   521500

Sales 7 Philadephia   949500

Sales 4 Philadephia   496000

Sales 9 Dallas   447500

Sales 9 Chicago   447500

Sales 5 Chicago   521500

Sales 1 Philadephia   70000

Software 6 Sacramento   810000

Administration 7 Stafford   949500

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Hardware 8 Milwaukee 1767000

Headquarters 4 Houston   496000

QA 9 Austin   447500

QA 1 Austin   70000

Research 9 Sugarland   447500

Research 8 Houston 1767000

Research 1 Sugarland   70000

Sales 7 Chicago   949500

Sales 4 Miami   496000

Sales 9 Philadephia   447500

Sales 5 Dallas   521500

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Administration 5 Stafford   521500

QA 7 Austin   949500

Research 7 Sugarland   949500

Sales 6 Miami   810000

Sales 5 Seattle   521500

Sales 8 Chicago 1767000

Sales 1 Seattle   70000

Software 7 Atlanta   949500

Software 9 Atlanta   447500

Administration 1 Stafford   70000

HR 8 Arlington 1767000

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Hardware 4 Milwaukee   496000

Hardware 9 Milwaukee   447500

Research 1 Houston   70000

Sales 6 Seattle   810000

Sales 6 Philadephia   810000

Sales 4 Dallas   496000

Sales 9 Seattle   447500

Sales 5 Miami   521500

Administration 6 Stafford   810000

HR 4 Arlington   496000

Hardware 7 Milwaukee   949500

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

QA 6 Austin   810000

Research 8 Bellaire 1767000

Research 1 Bellaire   70000

Sales 7 Miami   949500

Sales 8 Seattle 1767000

Sales 1 Dallas   70000

Software 1 Sacramento   70000

HR 5 Arlington   521500

Hardware 5 Milwaukee   521500

Headquarters 1 Houston   70000

QA 8 Austin 1767000

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Research 6 Sugarland   810000

Research 6 Houston   810000

Research 5 Sugarland   521500

Research 8 Sugarland 1767000

Sales 6 Dallas   810000

Sales 7 Dallas   949500

Sales 4 Chicago   496000

Sales 9 Miami   447500

Sales 5 Philadephia   521500

Sales 8 Philadephia 1767000

Software 7 Sacramento   949500

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Software 9 Sacramento   447500

Software 5 Sacramento   521500

Software 8 Sacramento 1767000

Administration 4 Stafford   496000

HR 7 Arlington   949500

HR 9 Arlington   447500

HR 1 Arlington   70000

Research 6 Bellaire   810000

Research 7 Houston   949500

Research 7 Bellaire   949500

Sales 7 Seattle   949500

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Sales 4 Seattle   496000

Sales 8 Miami 1767000

Sales 1 Miami   70000

Software 6 Atlanta   810000

Software 4 Sacramento   496000

Administration 8 Stafford 1767000

Hardware 1 Milwaukee   70000

Research 4 Sugarland   496000

Research 4 Houston   496000

Research 9 Bellaire   447500

Sales 6 Chicago   810000

DNAME       DNO DLOCATION   SUM(E.SALARY)

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

Sales 8 Dallas 1767000

Sales 1 Chicago   70000

Software 4 Atlanta   496000

Software 5 Atlanta   521500

Software 8 Atlanta 1767000

Software 1 Atlanta   70000

105 rows selected.

**5)**

SQL> select P.PNAME, P.PNUMBER, P.PLOCATION, COUNT (\*)

  2  from PROJECT P, WORKS\_ON W

  3  where P.PNUMBER = W.PNO

  4  GROUP BY P.PNAME, P.PNUMBER, P.PLOCATION;

PNAME   PNUMBER PLOCATION     COUNT(\*)

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

Advertizing 70 Arlington     4

ProductX 1 Bellaire     4

MotherBoard 29 Milwaukee     3

DataMining 13 Sacramento     1

EntityAnnot 4 Houston     3

InkjetPrinters 91 Milwaukee   10

Computerization 10 Stafford     6

LaserPrinters 92 Milwaukee     5

ProductY 2 Sugarland     4

ProductZ 3 Houston     5

DatabaseSystems 62 Atlanta   11

PNAME   PNUMBER PLOCATION     COUNT(\*)

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

Middleware 63 Atlanta     9

SearchEngine 22 Arlington     2

Human1 95 Arlington     4

ConfigMgmt 11 Atlanta     3

Reorganization 20 Houston     5

Newbenefits 30 Stafford     5

OperatingSystem 61 Sacramento   11

18 rows selected.

**6)**

SQL> select DISTINCT e.ssn, e.fname, e.lname, p.pnumber, p.pname, w.hours

  2  from employee e, project p, works\_on w, dept\_locations dl, department d

  3  where SSN=ESSN AND e.dno = 5 AND p.plocation = 'Houston';

SSN   FNAME   LNAME      PNUMBER PNAME   HOURS

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

453453453 Joyce   English   3 ProductZ     20

906218888 James   Miller   3 ProductZ     15

333445555 Franklin   Wong   4 EntityAnnot     10

333445555 Franklin   Wong   20 Reorganization     10

453453453 Joyce   English   20 Reorganization     20

636669233 Michael   Morgan   20 Reorganization     11

614370310 Andrea   Sondrini   3 ProductZ     45

123456789 John   Smith   20 Reorganization     7.5

906218888 James   Miller   20 Reorganization     15

636669233 Michael   Morgan   4 EntityAnnot     11

333445555 Franklin   Wong   3 ProductZ     10

SSN   FNAME   LNAME      PNUMBER PNAME   HOURS

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

123456789 John   Smith   20 Reorganization   32.5

906218888 James   Miller   4 EntityAnnot     15

636669233 Michael   Morgan   3 ProductZ     11

614370310 Andrea   Sondrini   20 Reorganization     45

123456789 John   Smith    4 EntityAnnot     7.5

614370310 Andrea   Sondrini   4 EntityAnnot     45

123456789 John   Smith    3 ProductZ   32.5

666884444 Ramesh   Narayan   20 Reorganization     40

453453453 Joyce   English   4 EntityAnnot     20

123456789 John   Smith    3 ProductZ     7.5

666884444 Ramesh   Narayan   3 ProductZ     40

SSN   FNAME   LNAME      PNUMBER PNAME   HOURS

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

123456789 John   Smith    4 EntityAnnot   32.5

666884444 Ramesh   Narayan   4 EntityAnnot     40

24 rows selected.

**7)**

SQL> select e.lname, e.fname, hours

  2  from employee e, works\_on w, project p

  3  where SSN=ESSN AND p.pnumber = w.pno AND hours > 40;

LNAME FNAME     HOURS

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

Thirteen Cameron 45

Zell Josh 48

Chase Jeff 46

Ball Nandita 44

Sondrini Andrea 45

**8)**

SQL> SELECT S.FNAME, S.LNAME, COUNT(\*)

  2  FROM   EMPLOYEE E, EMPLOYEE S

  3  WHERE E.SUPER\_SSN = S.SSN

  4  GROUP BY S.FNAME, S.LNAME;

FNAME LNAME   COUNT(\*)

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

Carl Reedy 1

Ahmad Jabbar 1

Kim Grace 1

Alec Best 1

John James 3

Naveen Drew 1

Franklin Wong 3

Red Bacher 2

Evan Wallis 3

Nandita Ball 2

Bob Bender 4

FNAME LNAME   COUNT(\*)

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

Lyle Leslie 2

Billie King 1

Juan Linda 2

John Ed 1

Josh Zell 2

Kate King 3

James Borg 3

Alex Freed 7

Jill Jarvis 1

Jennifer Wallace  2

Roy Lewallen 4

FNAME LNAME   COUNT(\*)

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

Jared James 4

John Smith 1

Bonnie Bays 1

Sam Snedden  1

Gerald Small 1

Sammy Hall 2

28 rows selected.

**9)**

SQL> select P.PNAME, SUM(hours)

  2  from employee e, works\_on w, project p

  3  where SSN=ESSN AND p.pnumber = w.pno

  4  GROUP BY P.PNAME;

PNAME SUM(HOURS)

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

InkjetPrinters       332

Computerization        119

ProductZ       109

SearchEngine 34

LaserPrinters       158

MotherBoard 40

OperatingSystem        358

ProductY       39.5

DatabaseSystems        347

Advertizing 72

Human1       101

PNAME SUM(HOURS)

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

ProductX       79.5

ConfigMgmt 65

Reorganization 44

EntityAnnot 61

DataMining 18

Newbenefits 84

Middleware       250

18 rows selected.