In the name of God
Database Lab
Spring 2016

Iman Tabrizian

April 6, 2016

Date Performed: March 2, 2016
Partners: Parham Alvani

1 Results and Conclusions

1. First query to create table schema:

```
CREATE TABLE "persons-1"
(
P_Id  int identity(1,1),
LastName varchar(255),
FirstName varchar(255),
Address varchar(255),
City varchar(255),
primary key (FirstName, LastName));

    SELECT * FROM "persons-1" ORDER BY LastName ASC;

    INSERT INTO "persons-1" (LastName, FirstName, Address, City ) VALUES ('Hans
    INSERT INTO "persons-1" (LastName, FirstName, Address, City ) VALUES ('Sven
    INSERT INTO "persons-1" (LastName, FirstName, Address, City ) VALUES ('Pett
    INSERT INTO "persons-1" (LastName, FirstName, Address, City ) VALUES ('Nils
    SELECT * FROM "persons-1";

    begin transaction t1

    UPDATE "persons-1" SET phone_number='0019392' where P_id=1;
    UPDATE "persons-1" SET phone_number='0019392' where P_id=2;
    UPDATE "persons-1" SET phone_number='0019392' where P_id=3;
    UPDATE "persons-1" SET phone_number='0019392' where P_id=4;

    commit transaction t1;
```

```
ELECT * FROM "persons-1";
```

a. SELECT FirstName,LastName,Full_address = (case P_id
when 1 then 'Jomhori'
when 2 then 'Enghelab'
when 3 then 'Felestin'
else 'Ferdowsi'
end) FROM "persons-1";

b. SET identity_insert "persons-1" on;
begin transaction t1
INSERT INTO "persons-1" (P_id, FirstName, LastName, City,Address,phone_number)
VALUES
(7,'Tjessem','Jakob', 'Nissestien 67', 'Sandnes','0017673276');
SELECT * FROM "persons-1" ORDER BY FirstName ASC;
commit transaction t1;

c. declare @temp int
SELECT @temp = max(P_id) FROM "persons-1";
while @temp ¿ 0
begin
print 'Okay';
set @temp=@temp-1;
end

d. declare @temp int
SELECT @temp = max(P_id) FROM "persons-1";
while @temp ¿ 0
begin
print 'Okay';
set @temp=@temp-1;
end

e. SET identity_insert "persons-1" on;
DELETE FROM "persons-1" where FirstName='taylor';
declare @temp nvarchar(255);
SELECT @temp = phone_number FROM "persons-1" where Firstname='Tjessem';
declare @casted int;
SET @casted = cast(@temp as int);
if @temp ¡ 0011234567
INSERT INTO "persons-1" (P_id,FirstName,Lastname, Address,City,phone_number)
VALUES (6,'taylor','Jackson','Nisseisten87','Sandnes','0011234567');

else
INSERT INTO "persons-1" (P_id,FirstName,Lastname, Address,City,phone_number)
VALUES (8,'taylor','Jackson','Nisseisten87','Sandnes','0011234567');
SELECT * FROM "persons-1";

2. (a) Creating table schema

```
CREATE TABLE "students-1"(
name varchar(255),
student_id int primary key,
grade int
);
```

(b) Adding data to table:

```
DELETE FROM "students-1";
INSERT INTO "students-1" (name,student_id,grade) VALUES ('R1',8831047,12);
INSERT INTO "students-1" (name,student_id,grade) VALUES ('R2',8831043,10);
INSERT INTO "students-1" (name,student_id,grade) VALUES ('R3',8831031,15);
INSERT INTO "students-1" (name,student_id,grade) VALUES ('R4',8831051,16);
INSERT INTO "students-1" (name,student_id,grade) VALUES ('R1',8831012,11);
SELECT * FROM "students-1";
```

(c) Achieving result:

```
declare @temp table(
nameb varchar(255),
student_idb int,
new_grade int,
old_grade int
);
UPDATE "students-1" SET "students-1".grade = "students-1".grade
+ 2 output inserted.name,
inserted.student_id,inserted.grade,deleted.grade into @temp where "students-
1".grade ¡ 15;
SELECT * FROM @temp;
```