

In the name of God
Database Lab
Spring 2016

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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)  
);
```

- (a) SELECT * FROM "persons-1" ORDER BY LastName ASC;
- (b) INSERT INTO "persons-1" (LastName,FirstName ,Address ,City)
VALUES ('Hansen','Ola','Timoteivn 10', 'Sandnes');
INSERT INTO "persons-1" (LastName,FirstName ,Address ,City)
VALUES ('Svendson','Tove','Borgvn 23', 'Sandnes');
INSERT INTO "persons-1" (LastName,FirstName ,Address ,City)
VALUES ('Pettersen','Kari','Storgt 20', 'Stavanger');
INSERT INTO "persons-1" (LastName,FirstName ,Address ,City)
VALUES ('Nilsen','Tom','Vingvn 23', 'Stavanger');
SELECT * FROM "persons-1";
- (c) 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;

```

```

SELECT * FROM "persons-1";

```

- (d)

```

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";

```
- (e)

```

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;

```
- (f)

```

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

```
- (g)

```

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

```
- (h)

```

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 First-
name='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;

```