Problem 1:

INSERT INTO TimeSlot

(timeSlotSetID, beginTime, endTime)

VALUES

(88, '20161201 10:30', '20161201 11:00')

Seek on PK\_Timeslot where TimeslotSetID = 88 to verify if it is already in database.

Seek on PK\_Timeslotset where TimeSlotSetID = 88 to see if it is available.

Append to PK\_Timeslot, generating new TimeslotID = @TimeslotID

Insert into PK\_Timeslot, timeslotsetID = 88, begintime = ‘20161201 10:30’, endtime = ‘20161201 11:00’ where TimeslotID = @timeslotID

Problem 2:

UPDATE User  
SET password = 'guest'  
WHERE userID = 1789

Seek on PK\_User to verify if userID = 1789 is present.

Overwrite password = ‘guest’ where userid = 1789

Problem 3:

INSERT INTO Meeting  
 (requesterID, timeSlotID)

VALUES  
 (789, 112674)

Seek on AK\_Meeting where requesterID = 789 and timeslotID = 112674 to check if it is already present.

Seek on PK\_Requester where requesterID = 789 to check if it is present(foreign key).

Seek on PK\_Timeslot where timeslotID = 112674 to check if it is present(foreign key).

Append to PK\_Meeting generating a new meetingID = @meetingID

Seek on AK\_Meeting where requesterID = 789 and timeslotID = 112674 for location to insert the index record

Insert into AK\_Meeting, requesterID = 789, timeslotID = 112674, meetingID = @meetingID

Problem 4

DELETE FROM TimeSlot  
WHERE timeSlotID = 36786273

Seek on AK\_Meeting where timeslotID = 36786273 to see if it is being used in a meeting entry.

Seek on PK\_TimeSlot the location of timeslotID= 36786273 and delete it.

Problem 5

DELETE

FROM   Meeting  
WHERE meetingID = 11789

(no foreign key dependencies)

Seek on PK\_Meeting where meetingID = 11789 to check if it is present and delete it

Problem 6

UPDATE User  
SET userName = 'klined'  
WHERE userID = 4578

Seek on AK\_userName where username = ‘klined’ for uniqueness

Seek on PK\_User to verify if userID = 4578 is present.

Overwrite username = ‘klined’ where userid = 4578