

## Database Lab Homework - 1

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### 1 PROBLEM 1

### 2 PROBLEM 2

```
CREATE PROCEDURE PatientFindOrAdd
    @id int, @name varchar(30),
    @zipcode int, @doctorName varchar(30),
    @problem varchar(40)
AS
    IF EXISTS (SELECT * FROM Patient WHERE PatientName = @name) AND EXISTS (SELECT * FROM Doctor
        SELECT Doctor.DoctorName, Doctor.Specialty
        FROM Patient, Doctor
        WHERE Patient.DoctorName = Doctor.DoctorName AND Patient.Problem = @problem)
    ELSE IF NOT EXISTS (SELECT * FROM Patient where PatientName = @name) AND NOT EXISTS (SELECT * FROM Doctor
        INSERT INTO Patient VALUES(@id, @name, @zipcode, @doctorName, @problem);
    ELSE
        PRINT('ERROR: PatientName or ID Not Found');
```

### 3 PROBLEM 3

```
CREATE FUNCTION DoctorSpecialty(
    @ID int
) RETURNS varchar(30)
BEGIN
```

```
DECLARE @specialty varchar(30);
SELECT @specialty=Doctor.Specialty FROM Doctor, Patient WHERE Patient.ID=@ID and Patient.D
RETURN @specialty
END
```

#### 4 PROBLEM 4

```
CREATE TRIGGER DoctorInsertDelete
ON Doctor
AFTER INSERT, DELETE
AS
    INSERT INTO DoctorLog SELECT inserted.*, 'Insert' FROM inserted;
    INSERT INTO DoctorLog SELECT deleted.*, 'Delete' FROM deleted;
```