

1.1

```
SELECT L.id, L.description
FROM Listings L, Calendar C, Reviews R
where L.id = R.listing_id
      and L.id = C.listing_id
      and R.listing_id = C.listing_id
      and C.available = 1
      and C.date = '1/1/2017'
      and L.review_scores_value >= 3.5
      and R.comments LIKE '%welcom%'
GROUP BY L.id, L.description
HAVING count(*) > 5
```

1.2

```
SELECT Table1.listing_id, count(Table1.listing_id)
FROM Listings L, (SELECT*
                  FROM Bookings B
                  WHERE B.stay_from between '1/1/2016' and '1/1/2017' AND
                        B.stay_to between '1/1/2016' and '1/1/2017') AS
Table1
WHERE L.id = Table1.listing_id
GROUP BY listing_id
HAVING COUNT(*) >= 10
ORDER BY COUNT(Table1.listing_id) DESC
```

1.3

```
SELECT Table2.date
FROM(SELECT C.date, MAX(B.number_of_guests) as max1
      FROM Calendar C, Bookings B
      GROUP BY C.date) AS Table2
```

2.1

```
CREATE TRIGGER booking
ON Bookings
AFTER INSERT
AS
IF(SELECT COUNT(*)
   FROM inserted
   WHERE inserted.id > 0) = 1
BEGIN
UPDATE Calendar
SET available = 0
WHERE listing_id = (SELECT listing_id
                   FROM inserted)
                  AND date between (SELECT stay_from
                                     FROM inserted)
                  AND (SELECT stay_to
                      FROM inserted)
END
```

2.2

```
ALTER TABLE Reviews
ADD guest_name varchar(100)
GO
```

```
CREATE TRIGGER Rev
ON Bookings
AFTER INSERT
AS
IF(SELECT COUNT(*)
   FROM inserted
   WHERE inserted.id > 0) = 1
BEGIN
UPDATE Reviews
SET guest_name = (SELECT guest_name
                 FROM inserted)
WHERE (SELECT listing_id from inserted) = listing_id
END
```

2.3

```
--For this question, I recived help from a classmate explaing conver(date,GETDATE())
CREATE TRIGGER checks
ON Reviews
AFTER INSERT
AS
IF NOT EXISTS(SELECT B.guest_name
              FROM Bookings B
              WHERE B.guest_name = (SELECT guest_name
                                     FROM inserted) AND
                                     (SELECT
convert(date,GETDATE())) >= B.stay_to)
BEGIN
ROLLBACK TRANSACTION
END
```