

*Unit Code Unit Name*

**Assignment 3: Database (Individual Assignment)**

**AMBULANCE SERVICE DATABASE**

**Student Name:**

**Student No:**

**Teaching Staff:**

## Database Tables in Ambulance Service Database:

### Calls

Name	Type
ID	Long Integer
Emergency Type	Long Integer
Address	Text
Postcode	Long Integer
Call time	Date/Time
Arrival Time	Date/Time
Company ID	Long Integer
EMT ID	Text

### Company

Name	Type
ID	Long Integer
Company Zip	Long Integer
Company area	Text

### Emergency

Name	Type
ID	Long Integer
Emergency	Text

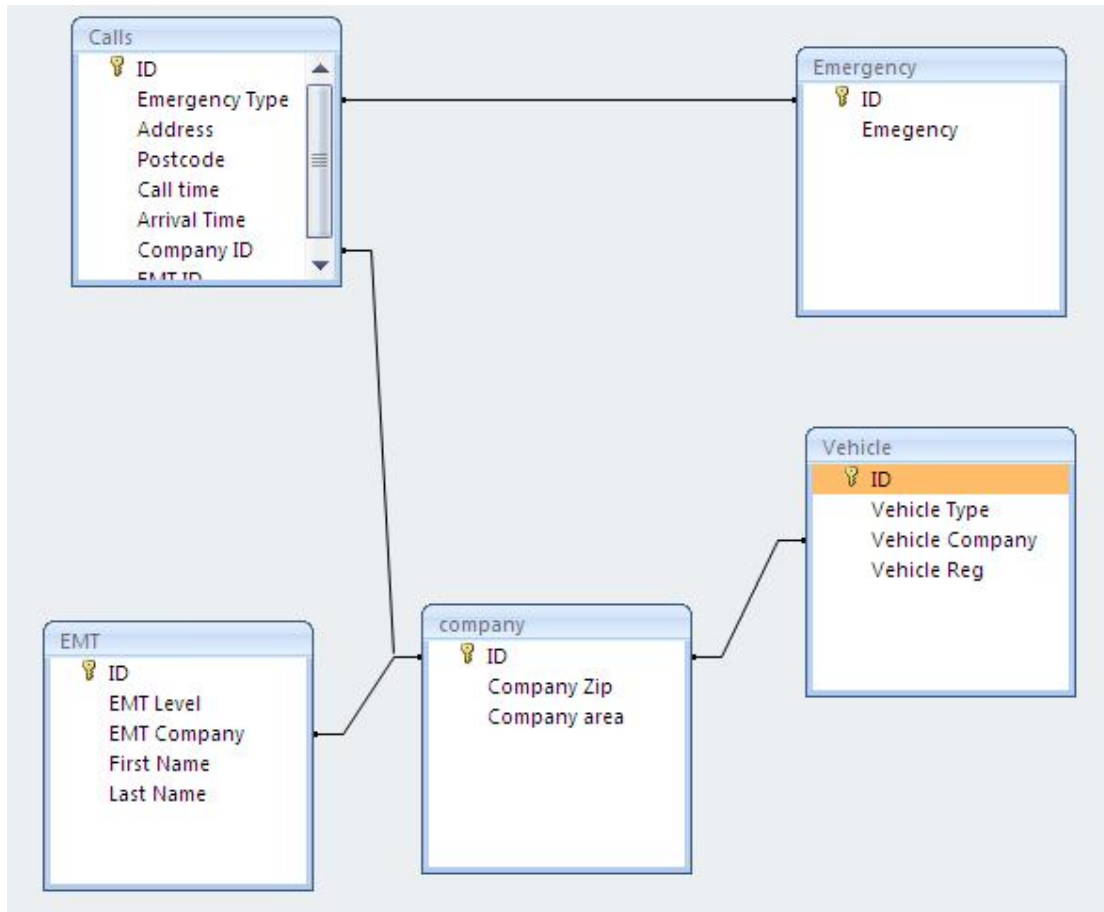
### EMT

Name	Type
ID	Long Integer
EMT Level	Text
EMT Company	Text
First Name	Text
Last Name	Text

### Vehicle

Name	Type
ID	Long Integer
Vehicle Type	Text
Vehicle Company	Text
Vehicle Reg	Text

**Relationships:**



SAMPLE

Switchboard:

## Ambulance Service Database

- EMT In/Out
- Report by Zipcode

Forms:

**Calls**

ID:

Emergency Type: Heart Attack

Address: 24 Down St.

Postcode: 3003

Call time: 2/11/2014 4:13:37 PM

Arrival Time: 2/11/2014 4:30:12 PM

EMT Name: James


Company Area

Company area	ID	Company Zip
West Melbourne	3	3003
*	(New)	3003

Record: 1 of 1 No Filter Search

Record: 1 of 13 No Filter Search

SAMPLE

**Report:**
 Report by zipcode
*Emergency Call Summary by Zipcode*

<i>Postcode</i>	<i>Call time</i>	<i>Emergency</i>
3000		
	2/12/2014 1:13:23 PM	Gunshot Wounds
	2/11/2014 4:15:13 PM	Gunshot Wounds
	2/11/2014 4:14:46 PM	Gunshot Wounds
	2/11/2014 4:13:37 PM	Snake Bite
3002		
	2/12/2014 4:09:27 PM	Heart Attack
	2/12/2014 3:46:07 PM	Vehicle Accident
	2/12/2014 3:40:57 PM	Vehicle Accident
	2/12/2014 1:01:59 PM	Heart Attack
	2/11/2014 4:15:19 PM	Vehicle Accident
3003		
	2/12/2014 2:22:42 PM	Heart Attack
	2/12/2014 2:21:40 PM	Vehicle Accident
	2/11/2014 4:39:06 PM	Heart Attack
	2/11/2014 4:13:37 PM	Heart Attack

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## Queries:

### 1. Frequency of Calls by Type of Emergency

```
SELECT Emergency.Emergency, Count(Calls.Postcode) AS [Number of
Calls], company.[Company area]
FROM (Calls INNER JOIN Emergency ON Calls.[Emergency Type] =
Emergency.ID) INNER JOIN company ON Calls.[Company ID] =
company.ID
GROUP BY Emergency.Emergency, company.[Company area];
```

Emergency	Number of Calls	Company area
Gunshot Wounds	2	Melbourne City
Gunshot Wounds	1	West Melbourne
Heart Attack	1	East Melbourne
Heart Attack	2	Melbourne City
Heart Attack	1	West Melbourne
Snake Bite	1	East Melbourne
Vehicle Accident	3	East Melbourne
Vehicle Accident	1	West Melbourne

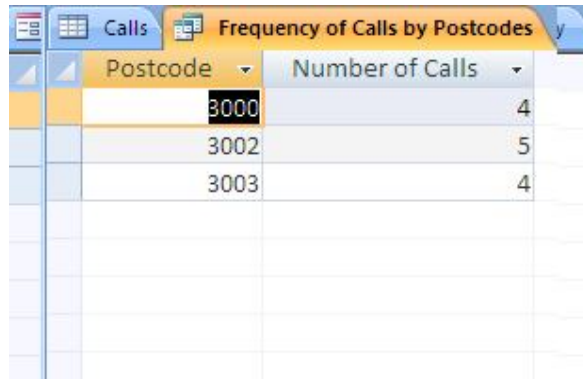
### 2. Frequency of Calls by Base Station

```
SELECT Count(Calls.[Company ID]) AS [Number of Calls],
company.[Company area]
FROM (Calls INNER JOIN company ON Calls.[Company ID] = company.ID)
INNER JOIN Emergency ON Calls.[Emergency Type] = Emergency.ID
GROUP BY company.[Company area];
```

Number of Calls	Company area
5	East Melbourne
4	Melbourne City
3	West Melbourne

### 3. Frequency of Calls by Postcodes

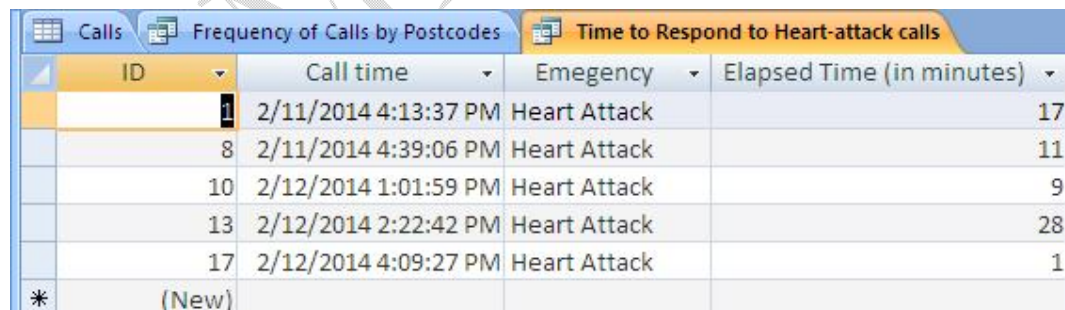
```
SELECT Calls.Postcode, Count(Calls.Postcode) AS [Number of Calls]
FROM Calls
GROUP BY Calls.Postcode;
```



Postcode	Number of Calls
3000	4
3002	5
3003	4

### 4. Time to Respond to Heart-attack call

```
SELECT Calls.ID, Calls.[Call time], Emergency.Emergency,
DateDiff("n",[Call Time],[Arrival Time]) AS [Elapsed Time (in
minutes)]
FROM Calls INNER JOIN Emergency ON Calls.[Emergency
Type]=Emergency.ID
WHERE (((Calls.[Emergency Type])=1));
```



ID	Call time	Emergency	Elapsed Time (in minutes)
1	2/11/2014 4:13:37 PM	Heart Attack	17
8	2/11/2014 4:39:06 PM	Heart Attack	11
10	2/12/2014 1:01:59 PM	Heart Attack	9
13	2/12/2014 2:22:42 PM	Heart Attack	28
17	2/12/2014 4:09:27 PM	Heart Attack	1
*	(New)		