

*/\* ALTERING DATABASE \*/*

```
create table skill (  
    skill_ID serial primary key,  
    skill_Name varchar(20) not null  
);
```

```
create table volunteer_Skill (  
    skill_ID int references skill(skill_ID),  
    volunteer_ID int references volunteer(volunteer_ID),  
    primary key(skill_ID, volunteer_ID)  
);
```

```
alter table volunteer  
drop column mainSkill;
```

*/\* POPULATE NEW TABLES \*/*

```
insert into skill (skill_Name) values ('JDA');  
insert into skill (skill_Name) values ('Jewelry Design');  
insert into skill (skill_Name) values ('Resume Writing');  
insert into skill (skill_Name) values ('ZBrush');  
insert into skill (skill_Name) values ('RTO');  
insert into skill (skill_Name) values ('Kurdish');  
insert into skill (skill_Name) values ('Lesson Planning');  
insert into skill (skill_Name) values ('Wiring');  
insert into skill (skill_Name) values ('TS2');  
insert into skill (skill_Name) values ('IKE');  
insert into skill (skill_Name) values ('Commercial Aviation');  
insert into skill (skill_Name) values ('RPT');  
insert into skill (skill_Name) values ('Technical Recruiting');  
insert into skill (skill_Name) values ('JDOM');  
insert into skill (skill_Name) values ('High Yield');  
insert into skill (skill_Name) values ('Glassfish');  
insert into skill (skill_Name) values ('PVST+');  
insert into skill (skill_Name) values ('GCC');  
insert into skill (skill_Name) values ('Nuke');  
insert into skill (skill_Name) values ('KDevelop');  
insert into skill (skill_Name) values ('Notary Public');  
insert into skill (skill_Name) values ('Nickel');  
insert into skill (skill_Name) values ('Financial Risk Management');  
insert into skill (skill_Name) values ('NBAR');  
insert into skill (skill_Name) values ('Rugby Union');  
insert into skill (skill_Name) values ('Global Mobility');  
insert into skill (skill_Name) values ('Justice');  
insert into skill (skill_Name) values ('IBM AIX');
```

```
insert into skill (skill_Name) values ('Device Drivers');
insert into skill (skill_Name) values ('SLA');
insert into skill (skill_Name) values ('Windows XP');
```

```
insert into volunteer_Skill (skill_ID, volunteer_ID) values (19, 33);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (30, 30);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (5, 9);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (8, 35);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (1, 8);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (5, 6);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (11, 8);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (27, 17);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (1, 35);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (9, 24);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (11, 18);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (29, 27);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (21, 15);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (3, 5);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (28, 9);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (12, 25);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (22, 12);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (10, 27);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (22, 10);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (24, 19);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (21, 5);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (28, 8);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (12, 35);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (29, 34);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (27, 11);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (26, 27);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (14, 16);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (10, 28);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (15, 7);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (26, 2);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (27, 4);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (19, 27);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (10, 34);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (24, 1);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (23, 8);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (22, 17);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (18, 20);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (16, 11);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (9, 20);
insert into volunteer_Skill (skill_ID, volunteer_ID) values (1, 24);
```

**insert into** volunteer\_Skill (skill\_ID, volunteer\_ID) **values** (2, 24);

*/\* BASIC QUERIES \*/*

*/\**

*YV could use this to get a list of all the staff members and the providers they manage so that they can contact all of them when requesting new volunteers*

*\*/*

**select**

concat\_ws(',', sm.surname, sm.forename) **as** "Staff Name",  
sm.emailAddress **as** "Contact Email",  
pr.name **as** "Provider"

**from** staff\_Member sm

**inner join** approved\_Provider pr **on** pr.staff\_ID = sm.staff\_ID

**order by** "Staff Name" **asc**;

```
coursework=# select
coursework-#   concat_ws(',', sm.surname, sm.forename) as "Staff Name",
coursework-#   sm.emailAddress as "Contact Email",
coursework-#   pr.name as "Provider"
coursework-# from staff_Member sm
coursework-# inner join approved_Provider pr on pr.staff_ID = sm.staff_ID
coursework-# order by "Staff Name" asc;
```

| Staff Name            | Contact Email                 | Provider                        |
|-----------------------|-------------------------------|---------------------------------|
| Aleksandrev, Aymer    | aaleksandrevi@kickstarter.com | Eichmann-Pfannerstill           |
| Allkins, Nancy        | nallkinsg@sciencedaily.com    | O'Connell-Bailey                |
| Beller, Jo ann        | jbeller@delicious.com         | Dickens Inc                     |
| Boatman, Keri         | kboatmanf@issuu.com           | Veum Group                      |
| Boatman, Keri         | kboatmanf@issuu.com           | Wisoky and Sons                 |
| Buckell, Reeve        | rbuckellh@feedburner.com      | Greenfelder, Roob and Swift     |
| Buckell, Reeve        | rbuckellh@feedburner.com      | Armstrong, Cole and Weber       |
| Byway, Witty          | wbywayo@omniture.com          | Jones-Renner                    |
| Byway, Witty          | wbywayo@omniture.com          | McKenzie, Kshlerin and Schaefer |
| Challicombe, Humphrey | hchallicombed@google.co.jp    | Hermann, Padberg and Casper     |
| Challicombe, Humphrey | hchallicombed@google.co.jp    | Bosco, Williamson and Cummerata |
| Danbury, Mordecai     | mdanbury6@usnews.com          | Johns, Weissnat and Orn         |
| Endrizzi, Erminie     | eendrizzi1@storify.com        | Shanahan, Bauch and Pouroos     |
| Garlette, Jamima      | jgarlette8@weather.com        | Price and Sons                  |
| Harwin, Archaimbaud   | aharwinj@trellian.com         | Boyle LLC                       |
| Hovard, Leonanie      | lhovard5@auda.org.au          | Harber-Kub                      |
| Islip, Karoline       | kislipc@nps.gov               | Kshlerin, Ratke and Bogan       |
| Islip, Karoline       | kislipc@nps.gov               | Kautzer Inc                     |
| Lipmann, Ellette      | elipmanne@1688.com            | Pfeffer and Sons                |
| Lipmann, Ellette      | elipmanne@1688.com            | Stamm-Beier                     |
| Lipmann, Ellette      | elipmanne@1688.com            | Treutel, Pfeffer and Armstrong  |
| Lumbley, Gabriele     | glumbley3@independent.co.uk   | Marquardt-Gutmann               |
| Lumbley, Gabriele     | glumbley3@independent.co.uk   | Rowe, Ziemann and Mitchell      |
| Lumbley, Gabriele     | glumbley3@independent.co.uk   | Stracke, Koss and Considine     |
| Lyttle, Ogdan         | olyttle7@npr.org              | Parker-Hickle                   |
| Lyttle, Ogdan         | olyttle7@npr.org              | Schaefer, Hodkiewicz and Hyatt  |
| Lyttle, Ogdan         | olyttle7@npr.org              | Blanda-Pouroos                  |
| Lyttle, Ogdan         | olyttle7@npr.org              | Treutel, Kshlerin and Legros    |
| McClean, Chandler     | cmcclean9@amazon.de           | Torp, Rutherford and Boyer      |
| Sapp, Vivia           | vsappn@wordpress.com          | Witting, Stark and Nader        |

(30 rows)

```

/*
Get all skills that a volunteer has listed
*/
select
  sk.skill_Name as "Skills"
from skill sk
inner join volunteer_Skill vs on vs.skill_ID = sk.skill_ID
where vs.volunteer_ID = 20 --Substitute value for ID that a script would pass in
order by "Skills" asc;

```

```

coursework=# select
coursework=#   sk.skill_Name as "Skills"
coursework=# from skill sk
coursework=# inner join volunteer_Skill vs on vs.skill_ID = sk.skill_ID
coursework=# where vs.volunteer_ID = 20 --Substitute value for ID that a script would pass in
coursework=# order by "Skills" asc;
Skills
-----
GCC
TS2
(2 rows)

```

```

/*
Get a count of how many volunteers have been enlisted from each provider
*/
select
  pr.name as "Provider",
  (select count(*)
   from volunteering_Contract vc
   inner join volunteer vo on vo.provider_ID = pr.provider_ID
   where vc.volunteer_ID = vo.volunteer_ID
  ) as "Number of Enlisted Volunteers"
from approved_Provider pr
order by "Number of Enlisted Volunteers" desc;

```



```

coursework=# select
coursework-#   pr.name as "Provider",
coursework-#   (select count(*)
coursework-#     from volunteering_Contract vc
coursework-#     inner join volunteer vo on vo.provider_ID = pr.provider_ID
coursework-#     where vc.volunteer_ID = vo.volunteer_ID
coursework-#   ) as "Number of Enlisted Volunteers"
coursework-# from approved_Provider pr
coursework-# order by "Number of Enlisted Volunteers" desc;

```

| Provider                        | Number of Enlisted Volunteers |
|---------------------------------|-------------------------------|
| Rowe, Ziemann and Mitchell      | 4                             |
| Pfeffer and Sons                | 4                             |
| Torp, Rutherford and Boyer      | 3                             |
| Kshlerin, Ratke and Bogan       | 3                             |
| Parker-Hickle                   | 2                             |
| Witting, Stark and Nader        | 2                             |
| Veum Group                      | 2                             |
| O'Connell-Bailey                | 2                             |
| Armstrong, Cole and Weber       | 2                             |
| Jones-Renner                    | 1                             |
| Kautzer Inc                     | 1                             |
| Johns, Weissnat and Orn         | 1                             |
| Treutel, Kshlerin and Legros    | 1                             |
| Treutel, Pfeffer and Armstrong  | 1                             |
| Boyle LLC                       | 1                             |
| Harber-Kub                      | 0                             |
| McKenzie, Kshlerin and Schaefer | 0                             |
| Eichmann-Pfannerstill           | 0                             |
| Blanda-Pouros                   | 0                             |
| Marquardt-Gutmann               | 0                             |
| Shanahan, Bauch and Pouros      | 0                             |
| Stamm-Beier                     | 0                             |
| Hermann, Padberg and Casper     | 0                             |
| Price and Sons                  | 0                             |
| Dickens Inc                     | 0                             |
| Bosco, Williamson and Cummerata | 0                             |
| Wisoky and Sons                 | 0                             |
| Stracke, Koss and Considine     | 0                             |
| Greenfelder, Roob and Swift     | 0                             |
| Schaefer, Hodkiewicz and Hyatt  | 0                             |

(30 rows)

```

/*
YV would need to get contact information for specific volunteers
*/
select
  vo.gender as "Sex",
  concat_ws(' ', vo.surname, vo.forename) as "Name",
  vo.emailAddress as "Contact Email",
  vo.phoneNumber as "Contact Number",
  concat_ws(' ', vo.address1, vo.postcode) as "Address"
from volunteer vo
where vo.volunteer_ID = 2; --Actual ID would be passed in via Script

```

```

coursework=# select
coursework=#   vo.gender as "Sex",
coursework=#   concat_ws(' ', vo.surname, vo.forename) as "Name",
coursework=#   vo.emailAddress as "Contact Email",
coursework=#   vo.phoneNumber as "Contact Number",
coursework=#   concat_ws(' ', vo.address1, vo.postcode) as "Address"
coursework=# from volunteer vo
coursework=# where vo.volunteer_ID = 2; --Actual ID would be passed in via Script

```

| Sex | Name                  | Contact Email        | Contact Number   | Address              |
|-----|-----------------------|----------------------|------------------|----------------------|
| M   | Artinstall, Engelbert | eartinstall1@mtv.com | +44 846 534 7568 | 2 Russell Alley, SG4 |

(1 row)

```

/*
Get all volunteers that live in a certain town/area
*/
select
  pr.name as "Provider",
  vo.volunteer_ID as "Volunteer ID",
  vo.gender as "Sex",
  concat_ws(' ', vo.surname, vo.forename) as "Name",
  vo.emailAddress as "Contact Email",
  vo.phoneNumber as "Contact Number",
  vo.address1 as "Street",
  vo.town as "Town",
  vo.country as "Country",
  vo.postcode as "Postcode"
from volunteer vo
inner join approved_Provider pr on pr.provider_ID = vo.provider_ID
where vo.postcode like 'SG%'; --Postcode area would be input by a script

```

```

coursework=# select
coursework=#   pr.name as "Provider",
coursework=#   vo.volunteer_ID as "Volunteer ID",
coursework=#   vo.gender as "Sex",
coursework=#   concat_ws(' ', vo.surname, vo.forename) as "Name",
coursework=#   vo.emailAddress as "Contact Email",
coursework=#   vo.phoneNumber as "Contact Number",
coursework=#   vo.address1 as "Street",
coursework=#   vo.town as "Town",
coursework=#   vo.country as "Country",
coursework=#   vo.postcode as "Postcode"
coursework=# from volunteer vo
coursework=# inner join approved Provider pr on pr.provider_ID = vo.provider_ID
coursework=# where vo.postcode like 'SG%'; --Postcode area would be input by a script

```

| Provider     | Volunteer ID | Sex | Name                  | Contact Email       | Contact Number   | Street          | Town    | Country        | Postcode |
|--------------|--------------|-----|-----------------------|---------------------|------------------|-----------------|---------|----------------|----------|
| Jones-Renner | 2            | M   | Artinstall, Engelbert | eartinstall@mtv.com | +44 846 534 7568 | 2 Russell Alley | Langley | United Kingdom | SG4      |

(1 row)

*/\* ADVANCED QUERIES \*/*

*/\**

*YV could use this to check their database for anyone who started volunteering in the last month  
I'm imagining a system that could send out an automatic email offering assistance if the  
volunteers need*

*\*/*

**select**

**distinct**

vo.volunteer\_ID as "Volunteer ID",  
concat\_ws(' ', vo.surname, vo.forename) as "Volunteer Name",  
vo.emailAddress as "Contact Email",  
vo.gender as "Sex",  
og.name as "Organisation",  
vc.startdate as "Start Date"

**from** volunteering\_Contract vc

**inner join** volunteer vo **on** vo.volunteer\_ID = vc.volunteer\_ID

**inner join** organisation og **on** og.organisation\_ID = vc.organisation\_ID

**where** vc.startdate **between** current\_date - integer '28' and current\_date

**order by** "Start Date", "Volunteer ID";

```

coursework=# select
coursework=#   distinct
coursework=#   vo.volunteer_ID as "Volunteer ID",
coursework=#   concat_ws(' ', vo.surname, vo.forename) as "Volunteer Name",
coursework=#   vo.emailAddress as "Contact Email",
coursework=#   vo.gender as "Sex",
coursework=#   og.name as "Organisation",
coursework=#   vc.startdate as "Start Date"
coursework=# from volunteering_Contract vc
coursework=# inner join volunteer vo on vo.volunteer_ID = vc.volunteer_ID
coursework=# inner join organisation og on og.organisation_ID = vc.organisation_ID
coursework=# where vc.startdate between current_date - integer '228' and current_date - integer '200' --Offset the period by 200 days here, purely because my dummy data has no entries within the recent month
coursework=# order by "Start Date", "Volunteer ID";

```

| Volunteer ID | Volunteer Name    | Contact Email      | Sex | Organisation | Start Date |
|--------------|-------------------|--------------------|-----|--------------|------------|
| 12           | Gristhwaite, Erin | egrithwaite@51.la  | M   | Lazz         | 2019-09-23 |
| 5            | Nendick, Malissa  | mnendick4@usgs.gov | F   | Oeba         | 2019-09-29 |
| 27           | Chipchase, Jarrod | jchipchase@ed.gov  | M   | Meedoo       | 2019-10-12 |
| 33           | Clayson, Mozes    | mclayson@prweb.com | M   | Fatz         | 2019-10-18 |

(4 rows)

*/\**

*Staff member can check all the contracts of volunteers that came from one of their provider  
organisations, and they will be displayed in groups of people from the same provider*

*\*/*

**select**

pr.name as "Provider",  
concat\_ws(' ', vo.surname, vo.forename) as "Volunteer Name",  
vo.gender as "Sex",

```

og.name as "Organisation",
vc.startdate as "Start Date",
vc.period as "Period"
from volunteering_Contract vc
inner join volunteer vo on vo.volunteer_ID = vc.volunteer_ID
inner join organisation og on og.organisation_ID = vc.organisation_ID
inner join approved_Provider pr on pr.provider_ID = vo.provider_ID
where pr.staff_ID = 15 --Actual Staff ID would be used, specific to different people
order by "Provider", "Volunteer Name";

```

```

coursework=# select
coursework=#   pr.name as "Provider",
coursework=#   concat_ws(' ', vo.surname, vo.forename) as "Volunteer Name",
coursework=#   vo.gender as "Sex",
coursework=#   og.name as "Organisation",
coursework=#   vc.startdate as "Start Date",
coursework=#   vc.period as "Period"
coursework=# from volunteering_Contract vc
coursework=# inner join volunteer vo on vo.volunteer_ID = vc.volunteer_ID
coursework=# inner join organisation og on og.organisation_ID = vc.organisation_ID
coursework=# inner join approved_Provider pr on pr.provider_ID = vo.provider_ID
coursework=# where pr.staff_ID = 15 --Actual Staff ID would be used, specific to different people
coursework=# order by "Provider", "Volunteer Name";

```

| Provider                       | Volunteer Name   | Sex | Organisation | Start Date | Period        |
|--------------------------------|------------------|-----|--------------|------------|---------------|
| Pfeffer and Sons               | Orhrt, Vincenty  | M   | Omba         | 2019-08-28 | Fixed Term    |
| Pfeffer and Sons               | Orhrt, Vincenty  | M   | Gigazoom     | 2019-08-22 | Rolling Basis |
| Pfeffer and Sons               | Orhrt, Vincenty  | M   | Abatz        | 2019-05-24 | Rolling Basis |
| Pfeffer and Sons               | Orhrt, Vincenty  | M   | Lazz         | 2019-03-12 | Rolling Basis |
| Treutel, Pfeffer and Armstrong | Nendick, Malissa | F   | Omba         | 2019-09-29 | Fixed Term    |

(5 rows)

```

/*
Get all volunteers with specified skill and their provider details so they can be recruited
The organisation can search for a skill, and appropriate volunteers will be displayed
*/

```

```

select
sk.skill_Name as "Skill",
concat_ws(' ', vo.surname, vo.forename) as "Volunteer Name",
vo.gender as "Sex",
vo.emailAddress as "Contact Email",
pr.name as "Provider",
concat_ws(' ', sm.surname, sm.forename) as "Staff Name",
sm.emailAddress as "Provider Contact Email"
from volunteer vo
inner join approved_Provider pr on pr.provider_ID = vo.provider_ID
inner join volunteer_Skill vs on vs.volunteer_ID = vo.volunteer_ID
inner join staff_Member sm on sm.staff_ID = pr.staff_ID
inner join skill sk on sk.skill_ID = vs.skill_ID
where lower(sk.skill_Name) like '%windows%' --Windows would be substituted for a search
term

```



**order by "Skill", "Volunteer Name";**

```
coursework=# select
coursework=#   sk.skill_Name as "Skill",
coursework=#   concat_ws(' ', vo.surname, vo.forename) as "Volunteer Name",
coursework=#   vo.gender as "Sex",
coursework=#   vo.emailAddress as "Contact Email",
coursework=#   pr.name as "Provider",
coursework=#   concat_ws(' ', sm.surname, sm.forename) as "Staff Name",
coursework=#   sm.emailAddress as "Provider Contact Email"
coursework=# from volunteer vo
coursework=# inner join approved_Provider pr on pr.provider_ID = vo.provider_ID
coursework=# inner join volunteer_Skill vs on vs.volunteer_ID = vo.volunteer_ID
coursework=# inner join staff_Member sm on sm.staff_ID = pr.staff_ID
coursework=# inner join skill sk on sk.skill_ID = vs.skill_ID
coursework=# where lower(sk.skill_Name) like '%windows%' --Windows would be substituted for a search term
coursework=# order by "Skill", "Volunteer Name";
   Skill   | Volunteer Name | Sex | Contact Email | Provider | Staff Name | Provider Contact Email
-----+-----+-----+-----+-----+-----+-----
Windows XP | Dowry, Bruno  | M   | bdowryt@noaa.gov | Rowe, Ziemann and Mitchell | Lumbley, Gabriele | glumbley3@independent.co.uk
(1 row)
```

*/\**

*Get list of all volunteers and how many places they are volunteering at, to help make sure volunteers don't get overstretched*

*\*/*

**select**

**distinct**

vo.volunteer\_ID as "Volunteer ID",

concat\_ws(' ', vo.surname, vo.forename) as "Volunteer Name",

(select count(\*)

from volunteering\_Contract vc

where vc.volunteer\_ID = vo.volunteer\_ID

) as "Contracts"

**from** volunteer vo

**inner join** volunteering\_Contract vc **on** vc.volunteer\_ID = vo.volunteer\_ID

**order by "Contracts" desc;**

```

coursework=# select
coursework-#   distinct
coursework-#   vo.volunteer_ID as "Volunteer ID",
coursework-#   concat_ws(' ', vo.surname, vo.forename) as "Volunteer Name",
coursework-#   (select count(*)
coursework-#     from volunteering_Contract vc
coursework-#     where vc.volunteer_ID = vo.volunteer_ID
coursework-#   ) as "Contracts"
coursework-# from volunteer vo
coursework-# inner join volunteering_Contract vc on vc.volunteer_ID = vo.volunteer_ID
coursework-# order by "Contracts" desc;
 Volunteer ID | Volunteer Name | Contracts
-----+-----+-----
          4 | Orhrt, Vincenty |          4
         30 | Dowry, Bruno   |          3
           3 | Matuszewski, Kristin |          2
         10 | Pellamont, Bryce |          2
         27 | Chipchase, Jarrid |          2
         33 | Clayson, Mozes  |          2
           1 | Lippitt, Lucilia |          1
           5 | Nendick, Malissa |          1
           8 | Di Dello, Elnore |          1
          12 | Gristhwaite, Erin |          1
          14 | Ebunoluwa, Mignon |          1
          15 | Geldeard, Floris |          1
          21 | Durtnel, Eddie  |          1
          22 | Lammerich, Jeni  |          1
          24 | Bortoloni, Winny |          1
          25 | Kobierski, Tasia |          1
          26 | Heitz, Cassandre |          1
          29 | Plews, Ole      |          1
          31 | MacLachlan, Alaric |          1
          32 | Rallinshaw, Ash  |          1
          34 | Bonhill, Javier  |          1
(21 rows)

```

/\*

*Get number of volunteers by region. Useful for searching for volunteers when recruiting for a single branch of a business*

\*/

```

select
  distinct
  unnest(regexp_matches(vo1.postcode, '([A-Z]+[A-Z]?)\d+.*$ ')) as "Postcode Area",
  vo1.town as "Town",
  (select count(*)
   from volunteer vo2
   where vo2.town = vo1.town
  ) as "Number of Volunteers"
from volunteer vo1
order by "Town";

```

```

coursework=# select
coursework=#   distinct
coursework=#   unnest(regex_matches(vo1.postcode, '([A-Z]+[A-Z]?)\d+.*$')) as "Postcode Area",
coursework=#   vo1.town as "Town",
coursework=#   (select count(*)
coursework(#     from volunteer vo2
coursework(#     where vo2.town = vo1.town
coursework(#   ) as "Number of Volunteers"
coursework=# from volunteer vo1
coursework=# order by "Town";
 Postcode Area |      Town      | Number of Volunteers
-----+-----+-----
 BS            | Bristol        | 1
 CT            | Buckland       | 1
 EH            | Burnside       | 4
 DL            | Carlton       | 1
 CB            | Church End     | 1
 OX            | Dean           | 1
 M             | Denton         | 2
 BH            | East End       | 1
 EH            | Edinburgh      | 1
 G             | Glasgow        | 1
 LS            | Halton         | 2
 DT            | Kingston       | 1
 SG            | Langley        | 1
 E             | London         | 3
 WC            | London         | 3
 NE            | Newbiggin      | 1
 NR            | Newport        | 1
 LE            | Normanton      | 1
 S             | Norton         | 1
 S             | Sheffield      | 1
 LN            | Stapleford     | 1
 AB            | Tullich        | 1
 LE            | Twyford        | 1
 DN            | Upton          | 1
 DN            | West End       | 1
 GU            | Weston         | 2
 DL            | Whitwell       | 2
 NN            | Wootton        | 1
(28 rows)

```