Queries Below are the 9 queries implemented in SQL and their respective outputs.

The database can be queried at the following url: https://kzc353.encs.concordia.ca/index.php.

1. Which student(s) is not a member of any team?

```
SELECT students.sid, students.name
FROM students
WHERE students.sid NOT IN (SELECT members.sid FROM members);
```

### Output:

| . 1                  |                      |                      |                  |
|----------------------|----------------------|----------------------|------------------|
| $\operatorname{sid}$ | name                 | $\operatorname{sid}$ | name             |
| 40                   | Helen-elizabeth Turn | 58                   | Sabrina Woodley  |
| 41                   | Leila Bertot         | 59                   | Bridie Hansard   |
| 43                   | Sophronia Bruckner   | 60                   | Gertrudis Pykett |
| 44                   | Eldin Roberds        | 61                   | Mord Tipperton   |
| 46                   | Alison Ivakin        | 62                   | Helen Hadkins    |
| 47                   | Izabel Dollin        | 67                   | Cecilia Ewbanck  |
| 48                   | Sallie Easlea        | 68                   | Faun Whales      |
| 49                   | Imogen Berrigan      | 74                   | King Cottrell    |
| 53                   | Stanford De Cleyne   | 75                   | Lorin De Vere    |
| 55                   | Etta Woolfenden      | 76                   | Lavina Wilks     |
| 56                   | Skippie Eglese       | 77                   | Arley Escoffer   |
| 57                   | Krissie Loges        |                      |                  |

2. For each team, list its members

```
SELECT members.sid, students.name, members.tid
FROM members, students
WHERE students.sid = members.sid;
```

Output:

| sid | name                    | tid | sid | name                  | tid |
|-----|-------------------------|-----|-----|-----------------------|-----|
| 1   | Natal Gravett           | 1   | 98  | Khalil Baudrev        | 7   |
| 8   | Eal Bevar               | 1   | 21  | Felita Martinson      | 8   |
| 13  | Hadrian Finlaison       | 1   | 69  | Shaun Bretland        | 8   |
| 34  | Marcelline Wardlaw      | 1   | 52  | Clerkclaude Vellacott | 9   |
| 66  | Camilla Ivanuschka      | 2   | 87  | Hans Gilstoun         | 9   |
| 85  | Ravner Edelston         | 3   | 97  | Cirstofor Arnaldv     | 9   |
| 90  | Daron Kenrat            | 3   | 2   | Faustine Millsap      | 10  |
| 100 | Laurie Emsden           | 3   | 10  | Prue Primarolo        | 10  |
| 84  | Tatum Rehorek           | 4   | 15  | Maury Pavinese        | 10  |
| 20  | Job Klimsch             | 5   | 16  | Roz Feavvour          | 10  |
| 95  | Cobb Bernardeau         | 5   | 3   | Evita Willbourne      | 11  |
| 23  | Misha Dener             | 6   | 11  | Lamar Sabbins         | 11  |
| 89  | Gregor Paridge          | 6   | 37  | Lavena Toe            | 11  |
| 99  | Andrea Bramont          | 6   | 51  | Michaelina Rosiello   | 11  |
| 4   | Johnette Corkell        | 7   | 22  | Kerstin Stairmon      | 12  |
| 88  | Millard Skeleton        | 7   | 82  | Phaedra Nyland        | 12  |
| 5   | Patty Connett           | 13  | 7   | Hastie Broggini       | 19  |
| 9   | Orville Jarnell         | 13  | 38  | Benito Jeste          | 19  |
| 17  | Rafael Ever             | 13  | 54  | Derron McGlynn        | 19  |
| 19  | Diane-marie Kubasiewicz | 13  | 78  | Jase Langridge        | 19  |
| 6   | Cozmo Storres           | 14  | 27  | Marven Hedge          | 20  |
| 12  | Eugene Killwick         | 14  | 65  | Chelsey Kettle        | 20  |
| 18  | Berti Yglesia           | 14  | 28  | Templeton Rickaert    | 21  |
| 45  | Ouintana Gidney         | 14  | 32  | Karen Barens          | 21  |
| 73  | Ruthe Coolson           | 15  | 29  | Pammie Milch          | 22  |
| 64  | La verne Officer        | 16  | 86  | Ilario Hinrich        | 22  |
| 83  | Codee Bevn              | 16  | 30  | Darius Doreward       | 23  |
| 96  | Orelie Boullin          | 16  | 50  | Jeremiah O'Hern       | 23  |
| 25  | Smith Pauwel            | 17  | 31  | Petronia Shoveller    | 24  |
| 72  | Milka Bridgnell         | 17  | 70  | Nathanil Cockerham    | 24  |
| 26  | Charlotta Josefsson     | 18  | 33  | Colas Paff            | 25  |
| 71  | Elinor Mottershead      | 18  | 39  | Robinet Pethybridge   | 25  |
| 81  | Konstance Bamburv       | 26  | 80  | Leslev Stove          | 28  |
| 93  | Maison Ciccetti         | 26  | 92  | Ellene Potzold        | 28  |
| 94  | Boony Innes             | 26  | 42  | Jermaine Ridolfi      | 29  |
| 14  | Bonny Brazenor          | 27  | 79  | Gerrilee Jagson       | 29  |
| 35  | Rodina Mebius           | 27  | 91  | Kendricks Stainburn   | 29  |
| 63  | Jackqueline Chant       | 28  | 24  | Alberto Lathave       | 30  |
| 1   |                         |     | 36  | Jesse Baike           | 30  |

3. Who was not present in the demo of a team?

SELECT students.sid, students.name, members.tid
FROM students, members
WHERE students.sid = members.sid AND students.sid NOT IN (SELECT demos.sid FROM demos);

## Output:

| $\operatorname{sid}$ | name            | tid |
|----------------------|-----------------|-----|
| 12                   | Eugene Killwick | 14  |
| 18                   | Berti Yglesia   | 14  |
| 25                   | Smith Pauwel    | 17  |
| 28                   | Templeton       | 21  |
| 37                   | Lavena Toe      | 11  |
| 54                   | Derron McGlynn  | 19  |
| 79                   | Gerrilee Jagson | 29  |
| 89                   | Gregor Paridge  | 6   |
| 99                   | Andrea Bramont  | 6   |

## 4. List the teams that have less than 4 members

```
SELECT teams.tid
FROM teams
WHERE teams.no_of_members < 4;</pre>
```

# Output:

| tid | tid |
|-----|-----|
| 2   | 18  |
| 3   | 20  |
| 4   | 21  |
| 5   | 22  |
| 6   | 23  |
| 7   | 24  |
| 8   | 25  |
| 9   | 26  |
| 12  | 27  |
| 15  | 28  |
| 16  | 29  |
| 17  | 39  |

## 5. Given a TID, list the names of the members

```
SELECT students.name
FROM students, members
WHERE students.sid = members.sid AND members.tid = ??;
```

For this query, the ?? would be replaced with a TID. We expect values between 1 and 30, any other value would not return anything.

Output for the query with a value of 11 (i.e. TID = 11):

name
Evita Willbourne
Lamar Sabbins
Lavena Toe
Michaelina Rosiello

6. Given a date, list all the teams that have demos on that day

```
SELECT DISTINCT demos.tid
FROM demos
WHERE demos.date = 'yyyy-mm-dd';
```

For this query, the *yyyy-mm-dd* would be replaced with a given date. Our schema uses the dates 2018-02-16 and 2018-02-17, any other values would not return anything. We also expect the parameter to be entered in this format. Any other format would result in an error.

Output for the query with a value of 2018-02-16:

| $\operatorname{tid}$ |
|----------------------|
| 1                    |
| 10                   |
| 11                   |
| 7                    |
| 5                    |
| 8                    |
| 12                   |
| 6                    |
| 18                   |
| 20                   |
| 22                   |
| 21                   |
| 9                    |
| 17                   |
| 3                    |
|                      |

7. For each team that is not complete, list the TID and the capacity to increase

```
SELECT teams.tid, 4 - teams.no_of_members AS 'Capacity to Increase' FROM teams
WHERE teams.no_of_members < 4;
```

Output:

| tid | Capacity to Increase | tid | Capacity to Increase |
|-----|----------------------|-----|----------------------|
| 2   | 3                    | 18  | 2                    |
| 3   | 1                    | 20  | 2                    |
| 4   | 3                    | 21  | 2                    |
| 5   | 2                    | 22  | 2                    |
| 6   | 1                    | 23  | 2                    |
| 7   | 1                    | 24  | 2                    |
| 8   | 2                    | 25  | 2                    |
| 9   | 1                    | 26  | 1                    |
| 12  | 2                    | 27  | 2                    |
| 15  | 3                    | 28  | 1                    |
| 16  | 1                    | 29  | 1                    |
| 17  | 2                    | 30  | 2                    |

8. Given a student Name or ID, find his/her team ID

When given a student ID:

```
SELECT members.tid
FROM members
WHERE members.sid = ??;
```

For this query, the ?? would be replaced with the student's ID. We expect values between 1 and 100, any other value would not return anything.

When given a student Name:

```
SELECT members.tid
FROM members, students
WHERE students.sid = members.sid AND students.name = 'Student name';
```

For this query, Student name would be replaced with the student's name.

Output for the query with a value of 1 or Natal Gravett:



9. Given a student Name or ID, find the names and SID of his/her teammates When given a student ID:

```
SELECT students.sid, students.name
FROM students, members
WHERE students.sid = members.sid
AND members.tid = (SELECT members.tid FROM members WHERE members.sid = ??)
AND students.sid <> ??;
```

For this query, the ?? would be replaced with the student's ID. We expect values between 1 and 100, any other value would not return anything.

When given a student Name:

SELECT students.sid, students.name
FROM students, members
WHERE students.sid = members.sid
AND members.tid =
(SELECT members.tid
FROM students, members
WHERE students.sid = members.sid AND students.name = 'Student Name')
AND students.name <> 'Student Name';

For this query, Student name would be replaced with the student's name.

Output for the query with a value of 14 or Cozmo Storres:

| $\operatorname{sid}$ | name            |
|----------------------|-----------------|
| 12                   | Eugene Killwick |
| 18                   | Berti Yglesia   |
| 45                   | Ouintana Gidney |