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|  | 2814ICT – Data Management  7003ICT – Database Design  School of Information & Communication Technology  Trimester 1, 2020  **Assignment Part 2:**  **Designing a Database for Commonwealth Transport Services** |

**ASSIGNMENT TITLE: MYSQL Database Creation & Required Query Identifications**

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| **Group ID** |  | |
| **Student 1** | **s-number:** | **Full name:** |
| **Student 2** | **s-number:** | **Full name:** |
| **Student 3** | **s-number:** | **Full name:** |
| **Course Code:** | | **Workshop/Lab day & time:** |
| **Tutor’s name:** | | **Date submitted:** |

**Marks obtained:** \_\_\_\_\_\_\_\_. [For marker to fill up.]

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|  |  |  |
| --- | --- | --- |
| Declaration  Except where appropriately acknowledged, this assignment is our own work, has been expressed in our own words and has not previously been submitted for assessment. We have also retained a copy of this assessment piece for our own records. | | |
| **Student 1:** | **Student 2:** | **Student 3:** |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Note: All students in the group must sign this first page, scan the signed page, and then place at the beginning of the assignment.**

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# Acknowledgements:

[List names of staff and students you have discussed with about this assessment.]

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# **Reports on SQL Queries in Task 3**

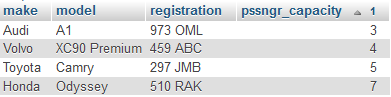
**Query 1:**

SELECT make,model,registration,pssngr\_capacity

FROM VEHICLE

WHERE availability='YES' ORDER BY pssngr\_capacity ASC;

**Output table:**

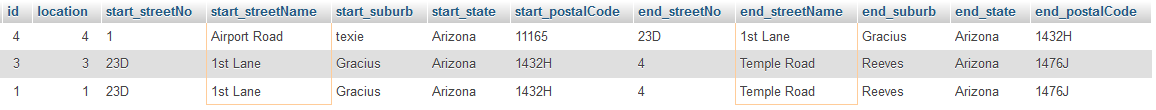


**Query 2:**

SELECT \*

FROM LOCATION

WHERE start\_streetName like '% %d' OR end\_streetName like'% %d';

**Output table:**

**Query 3:**

Country & Language in Understandable English >>>

SELECT OFFICIAL.name, COUNTRY.country, LANGUAGE.language

FROM OFFICIAL

INNER JOIN COUNTRY on COUNTRY.cn\_code = OFFICIAL.country

INNER JOIN LANGUAGE on LANGUAGE.ln\_code = OFFICIAL.preffered\_lng

ORDER BY OFFICIAL.name;

Country & Language in ISO format >>>>

SELECT name, country, preffered\_lng

FROM OFFICIAL

ORDER BY name;

**Output table:**

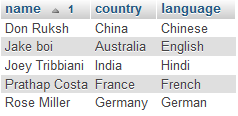


Figure 2: Country & Language in ISO format

Figure 1: Country & Language in Understandable English

**Query 4:**

SELECT MAINTANANCE\_REPAIR.date, VEHICLE.registration, VEHICLE.make, VEHICLE.model

FROM MAINTANANCE\_REPAIR

INNER JOIN VEHICLE on VEHICLE.vin = MAINTANANCE\_REPAIR.vehicle\_vin

WHERE MAINTANANCE\_REPAIR.nature='M' AND date IN (SELECT max(date) FROM MAINTANANCE\_REPAIR);

**Output table:**



**Query 5:**

SELECT name, travelled\_kms

FROM DRIVER

WHERE travelled\_kms>1000

ORDER BY travelled\_kms ASC;

**Output table:**

****

**Query 6:**

SELECT VEHICLE.registration, VEHICLE.make, VEHICLE.model, MAINTANANCE\_REPAIR.cost

FROM MAINTANANCE\_REPAIR

INNER JOIN VEHICLE on VEHICLE.vin = MAINTANANCE\_REPAIR.vehicle\_vin

WHERE nature='R'

HAVING cost > avg(cost) IN (select avg(cost) from maintanance\_repair WHERE nature='R');

**Output table:**

****

**Query 7:**

SELECT OFFICIAL.name, OFFICIAL\_ROLE.role

FROM OFFICIAL\_ROLE

INNER JOIN OFFICIAL on OFFICIAL.official = OFFICIAL\_ROLE.official\_id

WHERE NOT EXISTS (SELECT \* FROM TRIP WHERE OFFICIAL\_ROLE.official\_id = TRIP.official);

**Output table:**



**Query 8:**

SELECT vehicle\_vin, sum(cost) as total , nature

FROM MAINTANANCE\_REPAIR

GROUP BY vehicle\_vin,nature

ORDER BY total DESC

LIMIT 2;

**Output table:**



# 

# **Bibliography** [Optional]

1. Course Material
2. <https://gist.github.com/bradtraversy/c831baaad44343cc945e76c2e30927b3>
3. https://stackoverflow.com