In this worksheet you are to use the *RDB Revision 2 – Setup Script.sql* file to create the **MCAST** database.

1. **Show the name and surname of directors, and how long in years they have been hired.**

	name	surname	Duration
1	Tyrone	Grima	12
2	Godwin	Grech	12
3	Ray	Vassallo	11
4	David	Kenely	10
5	Philip	Vella	8
6	Ray	Vassallo	6
7	Malcolm	Borg	5
8	Conrad	Vassallo	4
9	Tonio	Pace	2

2. **Show the institute name for all institutes without a fax. If the townId is 2 show Paola, if it's 6 show Qormi, otherwise show Other.**

	InstituteName	Town
1	Institute of Applied Sciences	Paola
2	Institute of Applied Sciences	Qormi
3	Institute of Engineering and Transport - Electri...	Paola
4	MCAST Gozo Campus	Other

3. **Show all towns that contain an a and an o in their name. They can be in any order.**

	TownName
1	Ghajnsielem Gozo
2	Mosta
3	Paola

4. **Show the course code and course name for all courses that have (FT) in their duration, are from level 1 to 2. Sort by course code.**

	CourseCode	CourseName
1	AD1-01-14	MCAST Introductory Certificate in Art and Design
2	AG1-01-14	MCAST Introductory Certificate in Animal Husband...
3	AG2-01-14	MCAST Foundation Certificate in Horticulture and ...
4	AG2-01-14G	MCAST Foundation Certificate in Horticulture and ...
5	AS1-01-14	MCAST Introductory Certificate in Applied Science
6	AS2-01-14	MCAST Foundation Certificate in Applied Science
7	BC1-01-14	MCAST Introductory Certificate in Business

Total 22 Rows

5. **Write a query that will list the name, surname and date hired of all directors. Make sure that the director with the longest surname is placed first, then the longest name and then the hire date**

	Name	Surname	DateHired
1	Conrad	Vassallo	2016-09-01 00:00:00.000
2	Ray	Vassallo	2009-04-12 00:00:00.000
3	Ray	Vassallo	2014-02-03 00:00:00.000
4	David	Kenely	2010-01-31 00:00:00.000
5	Tyrone	Grima	2008-03-15 00:00:00.000
6	Godwin	Grech	2008-12-01 00:00:00.000
7	Philip	Vella	2012-06-06 00:00:00.000
8	Malcolm	Borg	2015-10-01 00:00:00.000
9	Tonio	Pace	2018-01-01 00:00:00.000

6. **Show the institute name and fax for all institutes that have Engineering in their name. If no fax is present show No Fax.**

	InstituteName	fax
1	Institute of Engineering and Transport	21423624
2	Institute of Engineering and Transport - Electrical...	No Fax
3	Institute of Engineering and Transport - Maritime	21809057
4	Institute of Engineering and Transport - Mechan...	23987490

7. **Show the unique values starting with 2 in duration column within the course table.**

	duration
1	2 Year (FT)
2	2 Years (FT)
3	2 Years Apprenticeship

8. **Write a query that displays one column named Course Details which has the following format:**
   <course name> is at level <MQF Level>
   for all courses with code AG1-01-14, AG4-01-15, AS6-02-15

	Course Details
1	MCAST Introductory Certificate in Animal Husbandry and Horticultural Skills is at level 1
2	MCAST Advanced Diploma in Animal Management and Veterinary Nursing is at level 4
3	Bachelor of Science (Honours) in Environmental Engineering is at level 6

9. **You are to create a password for each director created using the following:**
   - First two letters of the name
   - Dot
   - Third letter of the surname
   - Last letter of the surname in capitals
   - The length of the surname multiplied by 2.4 and then rounded to zero decimal places

	Password
1	To.cE12.0
2	Ma.rG17.0
3	Ty.iA14.0
4	Da.nY12.0
5	Ph.lA14.0
6	Ra.sO7.0
7	Co.sO14.0
8	Ra.sO7.0
9	Go.eH14.0

10. **Write a query that will display the full building name in the first column and building name starting from the first M to the first T in the second column named M2T. You should include only buildings that have the letter M before the letter T in their name.**

	building	M2T
1	MCAST Main Campus	MCAST
2	MCAST Main Campus	MCAST
3	MCAST Main Campus	MCAST
4	MCAST Main Campus	MCAST
5	MCAST Main Campus	MCAST
6	MCAST Main Campus	MCAST
7	MCAST Gozo Campus	MCAST

11. **Show the name and surname of directors. The month they were hired on, and if the month is July, August or September display Summer Period otherwise display Other.**

	Name	surname	Month	Hire Period
1	Tonio	Pace	January	Other
2	Malcolm	Borg	October	Other
3	Tyrone	Grima	March	Other
4	David	Kenely	January	Other
5	Philip	Vella	June	Other
6	Ray	Vassallo	February	Other
7	Conrad	Vassallo	September	Summer Period
8	Ray	Vassallo	April	Other
9	Godwin	Grech	December	Other

12. **Write a query that will list the total number of courses. Name the column # courses**

	# courses
1	114

13. Write a query that will display the MQF Level and number of courses for all the courses who contain the word Diploma

	MQFLevel	# courses
1	3	23
2	4	41
3	5	3

14. Write a query that will display two columns – Institute and Average MQF Level. You are to use the Course table only and calculate the average MQF Level for each institute. Only institutes with a value of 4 in the second column are to be included. If the institute id is 1 then the value in the first column has to be Applied Science, if the value is 3 then Creative Arts and if 8 then ICT. Sort as shown below

	Institute	Average MQF Level
1	ICT	4
2	Creative Arts	4
3	Applied Science	4

15. Write a query that will display the average duration per institute and MQFLevel. You are to include only institutes with an Id of 1, 5, 8, 10 and 11 who have an average duration of 1 or 3 years. Sort your result as shown below

	InstituteID	MQFLevel	Average Year Duration
1	1	1	1
2	1	2	1
3	1	3	1
4	1	6	3
5	5	1	1
6	5	2	1
7	5	3	1
8	5	6	3
9	8	1	1
10	8	2	1
11	8	3	1
12	8	6	3
13	11	1	1
14	11	2	1
15	11	3	1