INF10025 Data Management and Analytics

Tutorial 1 - Questions

Below you'll find the tutorial content for Week 1. The questions relate to the material covered in the lectures in Week 1. You do NOT have to submit any of these answer for marking. However, some of the topics discussed within this document are similar to test 1 questions. The answers to these questions will also help you to have a better understanding database concepts – and to build the learning summary of your final portfolio submission.

1. A Database is a collection of data. Databases often have 'front-end' applications. What business applications have you used that has a database back-end and uses a front-end application to interact with the users?

2. In Week 1, your lab instructor will also introduce you to Access. Is the Access interface intuitive for someone who knows nothing about databases? Why?

3. MS Access has many reserved words. What are reserved words? Why do you need to know about reserved words?

4. MS Access requires you to use / create tables. Each table has fields. Each field has datatypes. What is a datatype? What are commonly used datatypes?

5. According to relational database theory, all tables should have a primary key. What is a primary key? Why is it important?

6. How is an Access Table different from an Access Query?

7. True or False
   a. Every table in a relational database should have a Primary Key
   b. A table may have more than one Primary Key
   c. A Primary Key must not have a NULL value
   d. Every Primary Key must be unique within a single table
   e. Two different tables may not have rows with the same Primary Key value
   f. A table must have a minimum of 3 columns
   g. A table may not have zero rows
   h. A table may have not more than 1 million rows

8. Consider a Query with the criteria "Chair" on the column called ProdName Indicate which of the following Product names would be a match a. Chair
   b. ChaiR
   c. Rocking Chair
   d. Chairlift

9. Consider a Query with the criteria Like "Ed*" on the column called StudentName Indicate which of the following Product names would be a match

e. E.D.

f. Ed

g. EDDIE

h. Edina

10. Consider a Query with the criteria Like "t*" on the column called ProdName Indicate which of the following Product names would be a match

    i. Table

    j. Wooden Table

    k. Red table

    l. Ttable

11. Consider a Query with the criteria Like "*E*" on the column called EmpName Indicate which of the following Employee names would be a match

    m. Peter

    n. EVE

    o. steve

    p. Amelia

12. Consider a Query with the criteria Like "*r" on the column called EmpName Indicate which of the following Employee names would be a match

    q. Peter

    r. Richard

    s. Emma

    t. Roger

13. Consider a Query with the criteria Like "*e*d*" on the column called EmpName Indicate which of the following Employee names would be a match

    a. Edward

    b. Teddy

    c. Diane

    d. Peter Davies

Consider this table named CUST_SMALL

CustId	Gender	GivenName	Surname	Street	City	State	PostCode	SalesThisYea	SalesLastYea	LoyaltyPts	Rating	DateOfBirth
1043	M	Ben	Ferguson	46 Hill Blvd	Orielton	Tasmania	7172	0	0	7500	3	25/06/1956
1076	M	Connor	Espie	43 Beach Way	Prospect Vale	Tasmania	7250	118	202	9130	1	14/11/1958
1080	M	Ben	Freycinet	46 Mildura St	Norwood	Tasmania	7250	111	8	3300	2	31/12/1982
1084	F	Angelina	Glasgow	22 Mildura Roa	Cornwall	Tasmania	7215	846	787	7580	1	21/03/1946
1114	F	Bella	Gloucester	7/78 Gilbert St	Camdale	Tasmania	7320	466	863	2220	3	12/12/1950
1144	M	Charles	Frome	49 Shell Avenu	Cape Otway	Victoria	3233	0	0	1090	3	30/07/1953
1197	M	Angus	Govett	45 Marley Poir	Johnstones Hil	Victoria	3870	765	1133	1030	3	10/09/1985
1342	F	Angelina	Gleeson	14 Little Cresce	Rokewood	Victoria	3330	75	104	6150	2	13/01/1982
1364	M	Brayden	Eumarrah	74 Parkes Grov	Southbank	Victoria	3006	53	101	750	2	25/03/1954
1378	M	Aiden	Gowrie	74 Patton Stre	Croydon Hills	Victoria	3136	2355	401	6800	2	14/03/1934
1426	F	Amelie	Gawler	76 Maintongoc	Westbury	Victoria	3825	264	82	9230	1	14/08/1983
1436	M	Charles	Guthrie	82 Creedon Str	Jacana	Victoria	3047	5	3	6780	2	10/09/1985
1467	M	Brock	Graves	18 Fitzroy Stre	Greendale	Victoria	3341	706	890	4010	2	10/08/1996
1473	F	Ashley	Flack	7 Kaesler Road	Hatherleigh	South Australia	5280	725	1385	8650	1	21/01/1967
1491	F	Chelsea	Freeman	77 Cherokee La	Yandoit Hills	Victoria	3461	341	270	8560	2	26/01/1990
1508	M	Austin	Gilroy	56 Yarra St	Newlyn North	Victoria	3364	108	151	6560	2	29/01/1988
1545	F	Alannah	Fullwood	51 Auricht Cou	Marcollat	South Australia	5271	10	8	2540	1	10/12/1976
1586	F	Ashley	Gilles	27 Harris Road	Ancona	Victoria	3715	0	0	1330	2	15/05/1998
1659	F	Alexis	Forwood	14/88 McPhers	Granya	Victoria	3701	603	157	8710	2	30/12/1968
1685	M	Connor	Fidler	54 Scenic Road	Kalkite	New South Wa	2627	3015	2081	4080	1	11/01/1952
1715	F	Chloe	Grandi	75 Taylor Stree	Nalinga	Victoria	3646	3832	4982	3130	2	5/02/1993
1731	F	Audrey	Grimes	20 Garden Driv	Jeffcott	Victoria	3525	0	0	3890	2	28/05/1931
1776	M	Adam	Goodisson	38 Wilson Roac	Glenloth	Victoria	3527	368	692	2410	3	29/07/1942
1777	F	Brooke	Gellatly	40 Wilson Crt	Wycheproof	Victoria	3527	1377	1873	4320	1	15/04/1968

<u>Without</u> using any software, determine how many rows are selected by each of the following queries:

14.

Field:	CustId	Gender	GivenName	Surname
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:			Connor	
or:				

15.

Field:	CustId	Gender	GivenName	Surname
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:			Like "B*"	
or:				

16.

Field:	Custid	Gender	GivenName	State
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:			Like "C*"	"Victoria"
or:				

17.

Field:	CustId	Gender	GivenName	Surname
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:			Like "an*"	
or:			Like "be*"	

18.

Field:	CustId	Gender	GivenName	Surname	State
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:					
Show:	✓	✓	✓	✓	✓
Criteria:			Like "an*"		"tasmania"
or:			Like "be*"		"victoria"

19.

Field:	CustId	Gender	GivenName	Surname	State
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:					
Show:	✓	✓	✓	✓	✓
Criteria:			Like "an*" Or Like "be*"		"tasmania" Or "victoria"

20.

Field:	CustId	Gender	GivenName	Surname	LoyaltyPts
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:					
Show:	✓	✓	✓	✓	✓
Criteria:					Between 2000 And 2999
or:					

21.

Field:	CustId	GivenName	Surname	Rating
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:				1 And 2
or:				

22.

Field:	CustId	GivenName	Surname	SalesThisYear	LoyaltyPts
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:					
Show:	✓	✓	✓	✓	✓
Criteria:				>=200 And <500	Between 2000 And 2999
or:					

23.

Field:	CustId	GivenName	Surname	SalesThisYear	LoyaltyPts
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:					
Show:	✓	✓	✓	✓	✓
Criteria:			Like "E*"	<2000	>0
or:		Like "B*"		>500	

24.

Field:	CustId	GivenName	Surname	DateOfBirth
Table:	CUST_SMALL	CUST_SMALL	CUST_SMALL	CUST_SMALL
Sort:				
Show:	✓	✓	✓	✓
Criteria:				#10/09/1985#

…now continue with completing the first parts of Task 01.