# Terms and Definitions

www.tongatapu.net.to
January 4, 1999

## Databases

- *Data stored about a particular topic is a database.*
-
- Data is simply a collection of characters (that is, letters, numbers and symbols) which on their own have no particular meaning.

### Usefulness of database – What do people use it for ?

-
-

## Sources and References:


Bowden, Greg Guided Database Activities Using Microsoft Access, (Cambridge University Press, Cambridge, 1998)

http://www.tongatapu.net.to/compstud/ - Computer Studies Course Notes
http://www.tongatapu.net.to - **Tonga** on the **'NET**


**Tonga** on the **'NET** is available on all networked computers at Queen Salote College and participating schools.

### Description of the Booklet

This booklet is based on the “Introductory Database Exercises” book by Denise Pavic and Nelson Press.

The exercises have been modified to reflect the use of Microsoft Access, or Visual Database Tools.

The exercises in this booklet are broken into at most four different sections with the following aims:-
a – to develop skills in creating a database file, creating the database table structure, browsing the database and printing the database table.
b – to develop skills in modifying a database by editing, changing, adding records, changing the table structure and printing the database table.
c – to develop skills in retrieving an existing file, using the database to obtain information by listing, displaying, searching for specific conditions, summing, counting, averaging and locating specific records.
d – to develop skills in sorting, indexing, copying a database file, deleting a file, renaming a file and preparing a report.

Sample Solutions are maintained on the network server, verify with your instructor the location on the server for the files.

# Sources and References:

Pavic, Denise, Introductory Database Exercises, Nelson Press

http://www.tongatapu.net.to/compstud/ - Computer Studies Course Notes
http://www.tongatapu.net.to/extern/mspress/msaccess – Access Textbook
http://www.tongatapu.net.to - **Tonga** on the **'NET**

http://www.tongatapu.net.to is available on all networked computers at Queen Salote College.

Queen Salote’s SchoolNET Website does not require Internet access as it is not connected to the world wide Internet but uses the same technology within Queen Salote College and participating schools.

# Unit 1
# Airline

## Exercise 1

We have been hired by a small airline operating three different flights, to help them keep track of their passenger bookings. To keep a record of who has paid for their seats and how we will first take a look at putting together a database.

1. Create a database file called **Country Airlines**

2. In this database, create a table called **Flight Reservations**, with the below data structure.
   - Use "Design View"

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal Places* |
|---|---|---|---|---|
| Passenger | Text | 20 | | |
| Flight_No | Number | Integer | | |
| Date | Date/Time | | Medium | |
| Payment | Text | 8 | | |

   - Let Access create a Primary Key.

3. Enter the following details into the database file.
   - Ripper Jack, 303, 4 June 1990, Account
   - Stein Frank, 303, 4 June 1990, Cash
   - Temple Shirley, 421, 4 October 1990, Check
   - Bear Edward, 421, 4 October 1990, Visa

4. Check your database records.

# Unit 2

# Ratings

## Exercise 2

1. Create a database called “Television Ratings”

2. Create a table in the database called Programming, with the following data structures.

   - Use “Design View”
   - Let Access create a Primary Key.

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal Places* |
|---|---|---|---|---|
| Channel | Number | Byte | | |
| Program | Text | 16 | | |
| Day | Text | 8 | | |
| Time | Date/Time | Short Time | | |
| Length | Number | Byte | | |
| Rating | Number | Single | | 2 |

3. Enter the following data into your database

   - 7, CNN World Report, Mon-Fri, 18:00, 60, 8.25
   - 7, Superbook, Mon-Fri, 09:00, 60, 7.55
   - 7, MacGyver, Monday, 19:30, 30, 9.65
   - 7, Chuck Swindoll, Fri, 17:00, 60, 7.99
   - 3, Monday Night Movies, Mon, 19:00, 8.35

4. Check your database.

# Unit 3

# Tennis

## Exercise 3a

1. Create a database file for the local tennis club of those members playing weekend competition this season. Call your database file "**Tennis"**. Each record in the file will contain the fields; Last Name, First Name, Street, Suburb, and paid.

2. Create a new table in your database called "**Members**" and enter the record structure listed below:

   - Use "Design View"

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal Places* |
|---|---|---|---|---|
| Last Name | Text | 32 | | |
| First Name | Text | 32 | | |
| Street | Text | 50 | | |
| Suburb | Text | 25 | | |
| Paid | Yes/No | | | |

3. Enter the following data into your database.

   - Pakos, Mario, 1 Garter Street, Hamilton, Paid
   - Maxtell, Sam, 29 Elm Road, Croydon, Not Paid
   - Spaghetti, Jane, 3 Freda Avenue, Richmond, Paid
   - Peterson, Sue, 8 George Street, Windsor, Paid.

4. Check your database table.

5. Print your file.

## Exercise 3b

6. Make the following changes to the table.

   - Sam Maxell has sprained his ankle and is out for the season. Delete his name from the file.
   - Sue Peterson's husband Peter, has taken Sam Maxtell's place in the team. His club fees are still owing for the season. Add his name and details to the table.
   - Modify the structure of the table to include the field name GRADE. Add the grade for each player as listed below:
   - Mario Pakos C Grade
   - Jane Spaghetti F Grade
   - Sue Peterson B Grade
   - Peter Peterson A Grade

7. Check your table

8. Print your file

## Exercise 3c

*For the following exercise, after creating the exercise use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

9. Create a query named "qryGraded" to count those people playing A Grade this season

10. Create a query named "qryRecords" to list the Last Name, First name and grade for all records.

11. Create a query, and print a list of those people that are playing F grade and live in Richmond.

12. List those players who have paid fees for this season.

## Exercise 3d

13. Create a query to Sort on Last name to a new table called TennisBySurname

# Unit 4

# Supplier

## Exercise 4a

You work for Landers Manufacturing Pty Limited who enter their accounts payable into a database file. The file contains a number of suppliers from whom they regularly purchase goods.

1. Create a database file called "Landers Manufacturing Pty. Ltd." with table called "Suppliers" with the following fields.

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal* |
|---|---|---|---|---|
| Bill Date | Date | | | |
| Amount | Numeric | Currency | | 2 |
| Supplier | Text | 17 | | |
| Address | Text | 15 | | |
| Suburb | Text | 12 | | |

2. Enter the following bills outstanding for 1990. Expand all abbreviations.

| Bill Date | Amount | Supplier | Address |
|---|---|---|---|
| • 6 Sep 90 | 633.50 | Aus Ice Co | 3 Pole Street, Franskton |
| • 6 Sep 90 | 8546.28 | Tomray Pty Ltd | 466 Peak Way, Box Hill |
| • 16 Sep 90 | 2977.67 | Maya & Partners | 25 Kean Road, Somerville |
| • 3 Oct 90 | 624.88 | Monotek Micros | 87 Fosil Road, Burwood |
| • 12 Oct 90 | 6399.00 | Aus Ice Co | 3 Pole Street, Franskton |
| • 8 Nov 90 | 749.38 | Monotek Micros | 87 Fosil Road, Burwood |
| • 20 Nov 90 | 232.11 | Monotek Micros | 87 Fosil Road, Burwood |
| • 20 Nov 90 | 3222.22 | Maya & Partners | 25 Kean Road, Somerville |
| • 30 Nov 90 | 129.99 | Tomray Pty Ltd | 466 Peak Way, Box Hill |

3. Check your table for accuracy

4. Print your file

## Exercise 4b

5. Make the following changes

   - Monotek Micros changed its address to 1 Wells Street, Frankston, on 15 November 1990
   - Maya & Partners are located at 52 Kean Road, Somerville
   - Amend Aus Ice Co bill dated 12 October 1990 to $7498.76 as 1 box of goods was damaged and returned
   - The bill dated 6 September 1990 for $633.50 should be dated 26 September 1990
   - Tomray Pty Ltd became a public company on 1 October and is now known as Tomray Ltd

6. Add December's bills to the file. Expand all abbreviations. Details are:

| Bill Date | Amount | Supplier | Address |
|---|---|---|---|
| • 5 Dec 90 | $1000.00 | Tomray Ltd | 466 Peak Way, Box Hill |
| • 17 Dec 90 | $ 999.99 | Monotek Micros | 1 Wells Street, Frankston |

7. Check your table for accuracy

8. Print your table.

## Exercise 4c

*For the following exercise, after creating the exercise use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

9. Create a query to list only the [Bill Date] and [Supplier].
    - Write down at least one other method you could list (in Table Datasheet View) to achieve the same list above, without having to create a query.
10. Create a query to Total the outstanding bills payable by the company for 1990
11. Create a query to Sum the amount still owing to each Vendor for 1990
12. Create a query to list those Vendors who are owed more than $1000.00
    - Write down at least one other method you could list (in Table Datasheet View) to achieve the same list above, without having to create a query.
13. Create a query to display those bills dated before October 1990.
14. Create a query to count those bills owing to Monotek Micros

## Exercise 4d

15. Rename the table to "Payable"

# Unit 5

# Birthday

## Exercise 5a

You have decided to create a database of your friends' names (first name and last name) and their birthdays.

1. Create a database file called "**Friends and Relations"**

2. Create a new table in your database called "**Birthday**"

   - Use "Design View"
   - Let Access create a Primary Key.

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal* |
|---|---|---|---|---|
| Last Name | | | | |
| First Name | | | | |
| Birthdate | | | | |
| Notes | Memo | | | |

3. Input the following names into your database table (OR add the names and birthdays of the class.)

   - Minoghue, Kylie, 9 November 1981, Loves scorched almonds
   - Fox, Brenton, 31 August 1970
   - Dimitrios, Effie, 25 February 1935, Wears size 12
   - Reitson, Mary, 27 February 1988
   - Knotts, Donald, 5 April 1956
   - Page, Joan, 3 May 1960, Dislikes Roses
   - Tan, Lanny, 6 January 1980

4. Check your table to make sure all the data has been entered correctly

5. Print out the contents of the table

## Exercise 5b

6. Make the following changes to the database.

   Add these names to your file:
   - Adams, Gomez, 3 March 1968
   - Munster, Herman, 8 September 1944
   - Parton, Dolly, 6 January 1980

7. Some mistakes were made when entering the information into your database. Make the following corrections.

   - Kylie Minogue is the correct spelling of Kylie's name, not Minoghue
   - Mary Reitson was born in 1955
   - Brenton Fox prefers to be known by his nickname, Jack. Change his record to read Jack Fox.

8. Modify the table structure to add the field "**Star Sign**" Enter the star sign for each person in your database.

   The Star Signs are:
   - Scorpio – Kylie Minogue
   - Virgo – Jack Fox, Herman Munster
   - Pisces – Effie Dimitrios, Gomez Adams, Mary Reitson
   - Aries – Donald Knotts
   - Taurus – Joan Page
   - Capricorn – Lanny Tan, Dolly Parton

9. Check and print out the table

## Exercise 5c

*For the following exercise, after creating the exercise use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

10. Create a query named "qry**Names and Birthdays**" to display only the names and birthdates from the table.

11. Create a query named "qry**Single Stars**" to display only the names of those born under the star sign of "Virgo"

12. Modify the above named query to display only the names of those born under the star signs of "Aries" or "Pisces"

13. Create a query named "qry**countNovember**" to count the number of records with birthdays in November

14. Modify the above query to count the number of records with birthdays on the 3rd of the month.

15. Create a query named "qryStar Signs" to list Names and Star Signs.

16. Create a query named "qryOldies" to list those older than 20 years of age.

## Exercise 5d

17. Change the table structure to make the field Birthdate an indexed field.

18. Change the table structure to make Last Name an indexed field.

# Unit 6

# Smart

## Exercise 6a

The following people have expressed an interest in obtaining the new computer smart card.

1. Create a database file in your folder called "**Smart Card Requests**" (1 mark)

2. Create a table called "**Interested**" with the following suggested field names: (1 mark)

   - Last Name, First Name, Address, Suburb, State, Post Code (1 mark)

3. Enter the following interested people.

   - Barnes, Jimmy, 32 Forest Lane, Mt Waverley, Vic, 3149
   - Hawke, Robert, 55 Main Street, Moonie Ponds, Qld, 4406
   - Bush, George, 234 Smith Street, Collinswood, SA, 5081
   - Benatar, Pat, 32 Johnston Street, Coffs Harbour, NSW, 2450
   - Fraser, Malcolm, 4 Adamson Road, Colebrook, Tas, 7027
   - Whitlam, Gough, 55 James Street, Richmond, NSW, 2198

4. Check your table

5. Print out the table contents

## Exercise 6b

6. Add a new field to the existing table structure so that a telephone number may be entered for each person. The field name is "Phone". You must decide upon field type and width.

7. Change the records to include the telephone number listed below.

   - Barnes, Jimmy 337-3322
   - Hawke, Robert 419-8000
   - Bush, George 221-5600
   - Benatar, Pat 898-9900
   - Fraser, Malcolm 777-5543
   - Whitlam, Gough 643-2111

8. Check your table

9. Print out the table contents.

## Exercise 6c

*For the following exercise, after creating the query use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

10. Create a query named "qryPostcode" to list those people who live in a suburb with the postcode 2450.

11. Create a query named "qryPhones" to list the name and telephone number only, for all records.

12. Create a query named “qryMoonie” to list the names of those people who live in Moonie Ponds

## Exercise 6d

13. Change the field *Suburb* to be indexed.

14. Add two more names

    - Wilbur Wilde, 1 Queens Road, Dalby, Qld, 4405, 356-0982
    - Linda Kozoski, 49 Hillcres Avenue, Brighton, Vic, 3186, 288-9087

15. Check and print your table

# Unit 7

# Rates

## Exercise 7A

The Water Board collects payments of its bills (rates) in a database.

1. Create a database called “Tonga Waterboard” (1)

2. Create a table called “Customers” with the following fields. Calculate the field width.

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal Places* |
|---|---|---|---|---|
| Owner | Text | | | |
| Property | Text | | | |
| Suburb | Text | | | |
| Amount | Currency | | | |
| Paid | Yes / No | | | |
| Date | Date | | | |

3. Input the data below

| | Owner | Address | Suburb | Amount | Paid | Date |
|---|---|---|---|---|---|---|
| • | Tonga, T | 3 Frank Street | Croydon | 495.00 | Yes | 9 Sep 90 |
| • | Clepp, G | 29 Beach Street | Croydon | 503.99 | No | |
| • | Tacticos, S | 1 Sea Avenue | Croydon | 302.98 | No | |
| • | James, B | 2 Anderson Road | Croydon | 699.20 | Yes | 1 Oct 90 |
| • | Shepherd, N | 88 Nepean Highway | Croydon | 410.70 | Yes | 3 Mar 90 |
| • | Kurupu, B | 14 Ashlee Avenue | Croydon | 780.86 | No | |

4. Check your Database

5. Print the Table

## Exercise 7b

6. Make the following amendments to the Data

   - G Clepp paid 503.99 for the current year’s rates on 5 October 1990
   - The rates due on 14 Ashlee Avenue are $880.85
   - 1 Sea Avenue has been demolished for the building of units. Delete the property from the database.

7. Modify the structure of the table to include the field ARREARS. Arrears describe the outstanding amount, beyond the due payment date. Arrears of $650.90 are owing from last year on 14 Ashlee Avenue

8. Delete the field Suburb as all of the properties in the file are located in the local Suburb.

9. Check your database for accuracy

10. Print your database table

## Exercise 7c

*For the following exercise, after creating the query use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

11. List Owner, Address and Amount for all Croydon properties

12. List Property, Amount, Paid and Arrears

13. Search for those properties where rates payable are higher than $500.00.

14. How many properties have rates owing?

15. Calculate the average property rate.

16. Locate those properties owned by T Tonga.

## Exercise 7d

17. Produce a report for the Water Board with the "Rates Payable" for each of the properties in Croydon.
    - Page Title: Rates Payable 1990
18. Check and Print the Report.

# Unit 8

# Rental

BJ Spencer Real Estate stores tents property and we have been asked to help store these details into an electronic database.

## Exercise 8a

1. Create a database called **BJ Spencer Rentals**

2. Create a table called **Property** with the following data structure.

   - You must decide on the appropriate field-size to be used by reviewing the sample data in question 3, and the function of the field.
   - Use "Design View"
   - Let Access create a Primary Key.

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal Places* |
|---|---|---|---|---|
| Property | Text | | | |
| Owner | Text | | | |
| Tenant | Text | | | |
| Rental | Number | | | |
| Bond | Number | | | |
| Lease | Text | | | |

3. Enter the details of the current properties in the suburb called Manly

| | **Property** | **Owner** | **Tenant** | **Monthly Rental** | **Bond** | **Lease Period** |
|---|---|---|---|---|---|---|
| • | 25 Williams Road | Vlahos J | McLennan D | 400 | 500 | 12 Months |
| • | 6 Andrews Street | Starlight Pl | Emski I | 600 | 1000 | 12 Months |
| • | 8 Andrews Street | Starlight Pl | Carlson Z | 600 | 1000 | 6 Months |
| • | 9 Wood Crescent | Kean P | Richmon E | 1000 | 2000 | 12 Months |
| • | 10 Trample Avenue | New S | Tien R | 700 | 500 | Monthly |
| • | 322 Windel Road | Peters Ltd | Page J | 700 | 500 | Monthly |
| • | 955 Princes Highway | Vlahos J | Hayman R | 400 | 500 | 12 Months |

4. Check your database table

5. Print out the table

## Exercise 8b

6. Change the following records

   - 9 Wood Crescent is owned by P Kent and rented for $1100 per calendar month
   - The monthly rental on 322 Windel Road has increased to $810 per month
   - J Vlahos has removed 25 Williams Road from rental

7. The company has just received 2 more properties, as yet with no tenants. Add these properties to the database.

| | **Property** | **Owner** | **Tenant** | **Monthly Rental** | **Bond** | **Lease Period** |
|---|---|---|---|---|---|---|
| • | 2 Kingston Street | Chapman C | | 1000 | 2500 | 12 Months |
| • | 33 Crandwin Road | Taczanowski R | | 600 | 1000 | 6 Months |

8. Check your database

## Exercise 8c

*For the following exercise, after creating the query use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

9. Create a list of Rental Property and Owner

10. Create a list of Property, Monthly Rental and Bond Period

11. Calculate the average cost of rental properties in the suburb of Manly.

12. Count the number of properties with a rental higher than $400 per calendar month

13. Sum the total bond in the company's trust account for rental properties in Manly for this month (assuming there is currently a nil balance.)

## Exercise 8d

14. Sort on Owner to a table called **Property by Owner**

15. Delete the table Property

# Unit 9

# Records

Create the following database file called **Correspondence Records** which will contain details of businesses to which your company corresponds regularly

## Exercise 9a

1. Determine the data structure from the available information shown in question 2.
   - Let Access create a Primary Key.
2. Enter the following data.
   - Frankston Publishing Ltd, 46 Jackson Street, Frankston, Vic, 3199
   - Apple Computer Aust Pty Ltd, 87 Albert Road, South Melbroune, Vic, 3205
   - NEC Aust Pty Ltd, 649 Springvale Road, Mulgrave, Vic, 3170
   - L & J Flowers, 995 Whitehorse Road, Nunawading, Vic, 3131
   - ABC Business Equipment, 212 Toorak Road, South Yarra, Vic, 3141
   - Holmes & Sons, 9 Shell Street, Burwood, Vic, 3125
3. Check your data structure, and your database content
4. Print out the table

## Exercise 9b

5. Add the following business to the database
   - Australian Stationery, 55 Minor Street, Toorak, Vic, 3142
   - Beta Biscuits Limited, 15 Kingston Crescent, Langwarrin, Vic, 3910
6. ABC Business Equipment has moved their premises to 222 Toorak Road, South Yarra. Apple Computer Aust Pty Ltd is situated at 88 Albert Road, South Melbourne. Amend their addresses
7. Holmes & Sons is now a private company and is known as Holmes & Sons Pty Ltd.
8. Frankston Publishing Ltd is moving its office interstate. Delete the company details from the mailing list.
9. As all of the companies in the mailing list is situated in Victoria, modify the table to remove the field containing the “Vic” settings.
10. Delete the record for Apple.
11. Check your table
12. Send a print-out of the table

## Exercise 9c

*For the following exercise, after creating the query use the “SQL View” of the query and write down the SELECT query listed in the dialogue box.*

13. List the business name and address of all companies on the mailing list

14. List the business name and Suburb for all records

15. Count those businesses situated in Toorak

16. List those businesses that are not situated in Frankston

17. Locate the businesses with a postcode of 3125

18. Display those companies with a postcode less than 3150

## Exercise 9d

19. Index on Business Name to a file called Business. *(This means to create a new table called Business where all the records exist, and the new table is indexed using the Business Name)*

20. Index on Suburb to a file called Suburb.

# Unit 10

# Students

The Student Records Department at Queens University have all the student names attending the University entered into a database file. Student details include their Last Name, First Name, Course, Method of Study and Student Identification Number.

## Exercise 10a

1. Establish an electronic database for students enrolled in Certificate Courses. Call your database **Student Records**

2. Determine a suitable data structure using the below sample data.

   - Let Access create a Primary Key.

| ID No | Last Name | First Name | Level | Method | Major |
|---|---|---|---|---|---|
| 880198 | Massimini | Simon | Cert | PT | Computing |
| 881872 | Flower | Pamela | Cert | PT | Accounting |
| 880922 | Orlando | John | Cert | PT | Law |
| 871111 | Wine | Susan | Cert | PT | Computing |
| 889678 | Heloski | Ian | Cert | FT | Secretarial |
| 862345 | Rakic | Con | Cert | FT | Accounting |

3. Enter the data shown above into your database

4. Check the database records have been entered correctly

## Exercise 10b

5. Add the following students to the database

   - Emily Kutt, Certificate (Law), Part Time, 858328
   - Steven Amendola, Certificate (Computing), Full Time, 883344

6. Ian Heloski has deferred his course until next year. Remove his details from the database.

7. Simon Massimini has been asked to leave the course. Delete his record from the file

8. Delete the field Level, since this database only contains information from Certificate level courses.

9. Check your database

10. Print out the table

## Exercise 10c

*For the following exercise, after creating the query use the "SQL View" of the query and write down the SELECT query listed in the dialogue box.*

11. How many full time students are enrolled at the University Certificate courses ?

12. How many students' identification numbers begin with 88?

13. Print a list of those students enrolled in the Accounting Certificate

14. List student names and subject major for all records

15. List student names and identification number for all records

## Exercise 10d

16. Index on student ID to a table called ID.

17. Create a backup copy of your database file called **Student Records – Backup**

# Solutions

## Exercise 5c

10. Create a query named “qry**Names and Birthdays**” to display only the names and birthdays from the table.

```
SELECT Birthdays.[Last Name], Birthdays.[First Name], Birthdays.Birthdate
FROM Birthdays;
```

11. Create a query named “qry**Single Stars**” to display only the names of those born under the star sign of “Virgo”

```
SELECT Birthdays.[Last Name], Birthdays.[First Name], Birthdays.[Star Sign]
FROM Birthdays
WHERE (((Birthdays.[Star Sign])="Virgo"));
```

12. Modify the above named query to display only the names of those born under the star signs of “Aries” or “Pisces”

```
SELECT Birthdays.[Last Name], Birthdays.[First Name], Birthdays.[Star Sign]
FROM Birthdays
WHERE (((Birthdays.[Star Sign])="Aries" Or (Birthdays.[Star Sign])="Pisces"));
```

13. Create a query named “qry**countNovember**” to count the number of records with birthdays in November

```
SELECT Count(Birthdays.Birthdate) AS CountOfBirthday
FROM Birthdays
HAVING ((DatePart("m",[Birthday])=11));
```

14. Modify the above query to count the number of records with birthdays on the 3rd of the month.

```
SELECT Count(Birthdays.Birthdate) AS CountOfBirthday
FROM Birthdays
HAVING ((DatePart("d",[Birthday])=3));
```

15. Create a query named “qryStar Signs” to list Names and Star Signs.

```
SELECT Birthdays.[Last Name], Birthdays.[First Name], Birthdays.[Star Sign]
FROM Birthdays;
```

16. Create a query named “qryOldies” to list those older than 20 years of age.

```
SELECT Birthdays.[Last Name], Birthdays.[First Name], Birthdays.Birthdate
FROM Birthdays
WHERE (((Birthdays.Birthdate)<DateAdd("yyyy",-20,Now())));
```

**No-Moa Publishers** www.tongatapu.net.to

**Database Assessment Exercise** **January 4, 1999**

**Student Activity Booklet, Student Mark Booklet**

**Instruction to Candidates:** Candidate Name: .....

- Answer all questions in Blue or Black Pen. Use of any other coloured pen, or use of pencil will not be marked.
- Make Sure your name is on the Booklet
- Clarifications of questions are not penalised.
- Candidates are **not** permitted to communicate with each other at any time during the examination.

**Description of the Booklet**

This booklet serves as both the Activity Booklet you will use during the Common Assessment Task and as the Student Mark Booklet which is used to record your mark. Make all necessary markings on this booklet and it must be collected together with any other paper work at the completion of the examination.

You are required to hand in the diskette and booklet at the completion of the assessment exercise.

[Further Development Notes]

- Planned: Further localisation of Names, Addresses, Field-Names 9 (Suburb/Kolo, State/District)
- Purpose: Minimise discontinuity of subject to student reality

# Sources and References:


Denise Pavic "Introductory Database Exercises"

http://www.tongatapu.net.to/compstud/ - Computer Studies Course Notes
http://www.tongatapu.net.to/extern/mspress/msaccess – Access Textbook
http://www.tongatapu.net.to - **Tonga** on the **'NET**

http://www.tongatapu.net.to is available on all networked computers at Queen Salote College.

Queen Salote's SchoolNET Website does not require Internet access as it is not connected to the world wide Internet but uses the same technology within Queen Salote College and participating schools.




The contents of this booklet have been adapted from the Introductory Database Exercises by Denise Pavic

Candidate Name: ..... School: .....

Save answers to all changes to the document on the disk given to you.

You are required to hand in the diskette and booklet at the completion of the assessment exercise. You may ask questions and penalties are applied to questions requiring assistance with the manipulation of the word-processing exercise.

You are employed by the Premium Insurance Company of Vao Taataa Limited. Your job is to create a database for the company and enter the details of the following clients who have applied for insurance. *You may refer to your class notes.*

| Activity | Criteria | Mark |
|---|---|---|

## SECTION 1

1. Create a database file called "**Insurance**" 1
2. Create a table called "**Client**" to store your information 1
3. The field names required are [First Name], [Last Name], [Address], [Suburb], [State], [Post Code], and [Insurance]. You must decide the Data type and width.

   - Write below what you enter on your screen

| *Field Name* | *Data Type* | *Field Size* | *Format* | *Decimal* | **Criteria** | **Mark** |
|---|---|---|---|---|---|---|
| First Name | | | | | | 1 |
| Last Name | | | | | | 1 |
| Address | | | | | | 1 |
| Suburb | | | | | | 1 |
| State | | | | | | 1 |
| Post Code | | | | | | 1 |
| Insurance | | | | | | 1 |

4. Enter the following client details into the insurance database: 2
   - Mick Jagger, 40 Cast Way, Pialba, Qld, 4655, Household.
   - Bette Midler, 34 Mason Road, Preston, NSW, 2256, Boat
   - Tim Finn, 1 Citrus Street, Redbank, Qld, 4301, Motor Car.
   - Billy Idol, 9 Park Court, Farrer, ACT, 2607, Health
   - Sean Penn, 20 Hopkins Street, Kew, Vic, 3101, All Risks
   - Red Symons, 3 Winter Grove, Redbank, Qld, 4301, Life
   - George Michael, 12 Pearl Road, Fremantle, WA, 6160, Motor Car
   - Pat Benatar, 6 Bartlett Street, Gagebrook, Tas, 7030, Accident
   - Olivya Newton-John, 95 Peace Road, Box Hill, Vic, 3138, Health
   - John Farnham, 3 York Street, Windsor, SA, 5501, Accident

5. Enter your name in Record 11 2
6. Print the table 1

| Activity | Criteria | Mark |
|---|---|---|

## Section 2

*Create queries to find the desired solution for the below problems. Write down the SQL*

7. List the people living in Windsor ? 1

8. List the people interested in Motor Car Insurance ? 1

9. List the people who live in a suburb with the postcode 7030 ? 1

10. List the people, and from where they come from who do not require Health Insurance 1

11. List the suburbs with a postcode larger than 4000. 1

12. List the people who live in Fremantle and require Motor Car Insurance 2

## Section 3

13. Add the following clients to the file.
    - Kate Ceberano, 9 Carol Court, Frankston, Vic, 3199, Caravan 1

14. George Michael has decided to insure his car with “Blue Shield”. Delete his record from the 1

15. Some of the client details were incorrect. Make the following amendments:
    - Olivya Newton-John’s first name is Olivia and she lives in Pearce Street 1
    - John Farnham requires Fire Insurance 1
    - The Post Code for Box Hill is 3128 1

16. Modify the record structure of the table to include the field “Premium.” The field type is nu- 2

17. Enter the insurance premium for each client. 2

| | | | | | |
|---|---|---|---|---|---|
| Mick Jagger | 295.00 | Pat Benatar | 150.95 | Bette Midler | 301.90 |
| Olivia Newton-John | 345.90 | Tim Finn | 760.00 | John Farnham | 199.99 |
| Bill Idol | 345.90 | Kate Ceberano | 500.00 | Sean Penn | 460.85 |

| Activity | Criteria | Mark |
|---|---|---|

## SECTION 4

*Create queries to find the desired solution for the below problems. Write down the SQL*

| | | |
|---|---|---|
| 18. Add the total amount the company will receive from the insurance premiums for this year. | | 2 |
| 19. Count the number of people that require accident insurance | | 2 |
| 20. Print your database table | | 1 |

| Do not make markings below. For completion by course teacher. | |
|---|---|
| **Sub-total** | /36 |
| **Raw Mark for Submission (Mark less Assistance Penalty)** | /36 |

# Pacific Senior School Certificate
# Common Assessment Task 4 – Database

www.tongatapu.net.to

January 4, 1999

## Student Activity Booklet, Student Mark Booklet

**Instruction to Candidates:** Candidate Name: .....

- Answer all questions in Blue or Black Pen. Use of any other coloured pen, or use of pencil will not be marked.
- Make Sure your name is on the Booklet
- Clarifications of questions are not penalised.
- Candidates are **not** permitted to communicate with each other at any time during the examination.

**Description of the Booklet**

This booklet serves as both the Activity Booklet you will use during the Common Assessment Task and as the Student Mark Booklet which is used to record your mark. Make all necessary markings on this booklet and it must be collected together with any other paper work at the completion of the examination.

You are required to hand in the diskette and booklet at the completion of the assessment exercise.

# Sources and References:


PSSC Computer Studies CAT 4 – Database 1997

http://www.tongatapu.net.to/compstud/ - Computer Studies Course Notes
http://www.tongatapu.net.to/mspress/msaccess – Microsoft Access Textbook
http://www.tongatapu.net.to - **Tonga** on the **'NET**

http://www.tongatapu.net.to is available on all networked computers at Queen Salote College.

Queen Salote's SchoolNET Website does not require Internet access as it is not connected to the world wide Internet but uses the same technology within Queen Salote College and participating schools.



January 4, 1999

The contents of this booklet have been taken from the 1997 PSSC Database Common Assessment Task.

Candidate Name: ..... School: .....

Save answers to all changes to the document on the disk given to you.

Write answers to parts 3 & 4 in this answer booklet

You are required to hand in the diskette and booklet at the completion of the assessment exercise. You may ask questions and penalties are applied to questions requiring assistance with the manipulation of the word-processing exercise.

Here are the names, marks and other information, for the Year 12 computer studies class at Te Araroa College.

| Name | Form | Gender | Boarder | Test1 | Test2 |
|---|---|---|---|---|---|
| Sara | 12G | Female | No | 82.0 | 51.0 |
| Obed | 12Y | Male | Yes | 44.0 | 73.0 |
| Liz | 12Y | Female | Yes | 24.0 | 23.0 |
| Dave | 12G | Male | Yes | 42.0 | 33.0 |
| Will | 12G | Male | No | 25.0 | 18.0 |
| Ann | 12R | Female | Yes | 34.0 | 39.0 |

| **Activity** | **Criteria** | **Mark** |
|---|---|---|
| 1. Make a database file of the above information. Save this database onto your disk. Call | 2.14.1 | 1 |
| 2. Make a REPORT in table format, containing ALL the information in your database. Save this report as an ASCII FILE onto your disk in the A: drive. Call the file ANSWER2. | 2.14.1 | 1 |
| 3. Use a FORMULA to add the two test scores and divide the answer by two. Put these | 2.14.2 | 2 |
| Make a new report in table format which contains all the information in your database. Save this report as an ASCII FILE onto your disk in the A: drive. Call the file ANSWER3 | 2.15.4 | |
| 4. Sort the students in the class from top to bottom using the TOTAL field. Make a new REPORT in table format with all the sorted information in your database. Save this report | 2.13.2 | 2 |
| 5. Sort the students in alphabetical (A-Z) order using their name. Then apply a query to the database to list the information about students in Form 12G. Save this REPORT in | 2.13.2<br>2.13.3 | 2 |

6. Issue a query from your database to list ONLY the NAME and FORM of all the MALE students who are BOARDERS. Write in the grid below the result of your query. (ie what you see on your monitor after making the query) 2.13.3 3

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

7. Issue a query from your database that lists the NAMES, FORM, and TOTAL of all Females who are in 12G or 12Y. Write in the grid below the result of your query (ie. what you see on your monitor after making the query. 2.13.3 3

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

8. Obed's Test1 score is not correct. He scored 51. Also, Sara becomes a boarder during the term. Make these corrections to your database. Sort the TOTAL field from high to low score. Make a new REPORT in table format with all the information that is now in your database. 2.14.2 2

9. Sara leaves the college when she finds employment during the year. Delete her record from the database. Make a new REPORT in table format with all the information that is now in 2.13.4 1

| Do not make markings below. For completion by course teacher. | |
|---|---|
| **Sub-total** | /17 |
| **Raw Mark for Submission (Mark less Assistance Penalty)** | /17 |