

You work for the Tawara Dive School. The company has opened a new office in Cozumel, Mexico. You will create a database to analyse data about their diving trips.

Dates are to be displayed in dd/mm/yyyy format.

All times are to be displayed in hh:mm format and are set to GMT (Greenwich Mean Time).

You must use the most efficient method to solve each task.

- 1 You are required to provide evidence of your work, including screenshots at various stages. Create a document named:

CentreNumber_CandidateNumber_Evidence

e.g. ZZ999_99_Evidence

Place your name, Centre number and candidate number in the header of your Evidence Document.

- 2 Examine the data in the file

M17Dive.csv

In the *Date* column, use formulae to display the date of each dive, using the *Day*, *Month* and *Year* columns. Save this file.

Show evidence of your formulae in your Evidence Document. [2]

- 3 Examine the data in the files:

M17Diver.csv

M17Site.csv

M17Qual.csv

Create a new database. Import these files and the file saved in step 2 but do **not** import the data in the *Day*, *Month* or *Year* columns.

Tawara Dive School have decided that all field names must be short, meaningful, consistent in style and contain no spaces.

The depth of a dive is either deep (D) or shallow (S).

Some table names, field names, key fields and data types are shown on page 3. Where they are not given, choose your own.

Use this information to help you create the tables: [41]

	Dive			Site	
	Field name	Data type		Field name	Data type
🔑	Dive_No	Alphanumeric		Site_ID	
	Date	Date		Site_Name	
	Site_ID				
	Boat			Travel_Time	
	Lead_Diver	Alphanumeric			

	Diver			Quals	
	Field name	Data type		Field name	Data type
	Forename	Alphanumeric			
			🔑 denotes primary key		

4 Place in your Evidence Document screenshots to show the structure of the four tables, including the field names, data types and key fields.

5 Establish appropriate relationships to link the four tables to create a relational database.

Place in your Evidence Document screenshots to show the relationships between these tables and each relationship type. [9]

6 Create a report of all dives from the Oystier between the 5th January 2017 and the 15th January 2017. Do **not** include these dates. Display only the dive site, boat name, date, the lead diver's forename, surname and qualification.

Sort the data into ascending order on the name of the dive site.

Add a suitable title to the report. Make sure that your name, Centre number and candidate number are placed in the footer.

Place in your Evidence Document screenshots that show how you extracted this data.

Print this report. [10]

7 Your manager wants to analyse the data relating to deep diving trips.

Create and fully label a report that contains only the:

- name of the dive site
- travel time to the site
- dive time
- total time for each dive **trip** (including the travel times to and from each site).

Sort the data into descending order on the total time.

Calculate the average **trip** time for this report.

Place your calculation and a suitable label in an appropriate position in the report.

Add a suitable title to the report. Make sure that your name, Centre number and candidate number are placed in the footer.

Place in your Evidence Document screenshots that show how you extracted this data and any calculations.

Print this report.

[14]

8 Create a query which contains the dive number, boat name and a new calculated field called **Name**. This field must contain the forename followed by a space then the surname of each lead diver. Place in your Evidence Document screenshots that show how you created this new field.

Create and fully label a report that displays the number of dives taken by each lead diver from each boat. Use the *Name* field for the row headings, and the boat names for the column headings. Do **not** include the row or column totals.

Place your name, Centre number and candidate number in the header.

Print this report on a single portrait page, showing gridlines in the table.

[11]

9 Your manager wants a list of divers and boats where the dive names contain Palancar, Columbia or Cedral.

Create a report which lists the names of these lead divers as well as their pay rates, qualifications, the dates of the dives and the boat used for these trips.

Group this report by the name of the lead diver. Include their pay rate and qualification in the group header. For each lead diver, group the report by the name of each dive site.

Add a suitable title to the report. Make sure that the text **Report created by:** followed by your name, Centre number and candidate number are included in the header.

Prepare this report so that it fits within the width of a portrait page and is easy to read.

Print this report.

[14]

- 10** Calculate the total dive time taken by each lead diver on each day, where a lead diver has completed more than one dive. Include for each diver their full name, the date and the total dive time.

Use this data to create a report that displays only the dives between the 16th and 25th January 2017. Do **not** include these dates. Sort this data into descending order of total dive time.

Place in the header of the report:

- an appropriate title
- the image **M17image.jpg**
- your name, Centre number and candidate number.

Place in your Evidence Document the method(s) used to extract this data.

Print this extract on a single page, displayed as a table with gridlines. [14]

- 11** Use the results of your search in step 10 to create a chart showing only the divers with total dive times of more than 2 hours.

Place the chart in your Evidence Document. [5]

- 12** Save and print your Evidence Document.

Write today's date in the box below.

Date

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