Coursework Task

Higher Information Systems

Valid for session 2011/2012 only

Please read Section I carefully before issuing materials to candidates.

Coursework Task

Subject: Information Systems

Level: Higher

Publication date: October 2011

Publication code: BB3418

Contents

Section 1

Organisation and Conditions for Assessment

Organisation and Conditions for Assessment

The assessment is designed to test the candidate's ability to apply knowledge and understanding and practical skills, developed through study of the Relational Database Systems and Using Information Units. The mark out of 60 should be submitted to the SQA unscaled. This will be combined with the examination mark out of 140 to establish the candidate's overall grade of award. This mark should also be used in conjunction with internal examination marks or other evidence in the preparation of a candidate's estimated grade of performance.

The notional design length for the assessment is 8–10 hours. However, a candidate may be permitted additional time if required.

The assessment is to be undertaken under "open book" conditions, but under the supervision of a teacher or lecturer to ensure that the work submitted is the candidate's own work. The teacher or lecturer may give the candidate guidance and/or help if requested. Any such help should be reflected in the marks awarded.

Once the task has been completed and marked, it should not be returned to the candidate for further work.

These instructions are designed to be used in conjunction with data files provided with the electronic distribution of the task. These can be downloaded from the SQA secure website.

Special Arrangements for Higher Coursework 2011-2012

Centres are asked to pay special attention to the following arrangements.

Candidates are not required to spend time entering data into a database. Instead, the data should be prepared beforehand and provided to candidates by the centre.

To facilitate this, Microsoft Access (2003 format) and Filemaker (v.7) as well as text (tab) delimited and csv data files have been provided. It is intended that candidates will be provided with **three versions** of the database.

The **first database** (**PAFI Task 2**) contains three of the tables of the system; Venue, Course and Member. Each table will have all attributes correctly implemented although the tables will not be related. Candidates will be required to create the Certificate table from the completed data dictionary and then set up the relationships between all the tables. Candidates will be required to submit a printout of the Documenter (or equivalent) of the **Certificate table only** as evidence for Task 2(a). Evidence for Task 2(b) could be generated from the Documenter again (selecting only Relationships in the options) but the evidence must show three correct one-to-many relationships. Candidates will **not** use their database structures to complete Tasks 3-5. Instead, centres should issue candidates with the second, fully populated database.

The **second database** (**PAFI Tasks 3-5**) will be a complete implementation of the system. This will include all validations, relationships etc – ie an exact implementation of the data dictionary provided to candidates at Task 2. This working database should be issued to candidates **after** Task 2 has been submitted. Candidates **must** use this working database to complete Tasks 3-5.

A **further database** (**PAFI Task 6**) should be issued to candidates to allow Task 6 to be completed.

Microsoft Access and Filemaker files are provided. Centres using other systems will require to create all three versions of the databases from the tab separated file and csv files provided. These files can also be used if centres encounter any difficulties with the supplied Access or Filemaker databases.

Additional notes follow which detail how candidate evidence is to be generated.
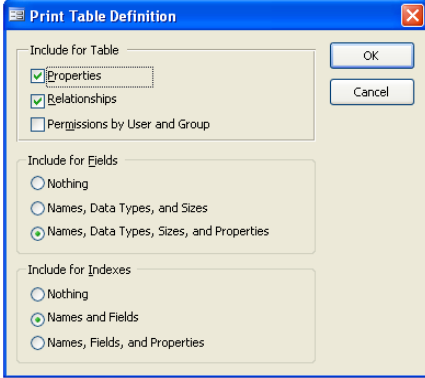
Notes:

Candidates may be reminded that this Coursework is taken under "open book" conditions. As such, use may be made on on-line help facilities, notes or any other support materials in the course of carrying out tasks.

Candidates should be given a copy of the marking grid from Section 3 (**not** the detailed marking instructions) before starting the task so that they are aware of the mark distribution for each part.

The entire Coursework Task consists of ten tasks. Centres should take note of the points detailed below for each task.

Task	Evidence
1	Hardcopy of proforma provided or can be produced by the candidate. **Task 1 must be completed and data dictionary handed in for marking before the materials for Task 2 are issued**.
2 (a)	Documenter (MS Access) printout or equivalent showing table structure for the Certificate table only.
2 (b)	Printout showing correct cardinality of relationships (Documenter in Access can be used to produce **only** the relationships information through the options). o In FileMaker Pro8, to get a printout of the design, candidates should adhere to the following instructions. (1) Select the "Define" option from the File menu and then select the "Database" option from the sub-menu. (2) Click on the Tables tab. (3) Highlight both tables by clicking on the name of the first table then holding down the shift key and clicking on the other table. (4) Click on the Print button. o In MS Access, to get a printout of the design, candidates should adhere to the following instructions. (1) Select the "Analyze" option from the Tools menu and then select the "Documenter" option from the sub-menu. (2) Select the table(s) required and then click Options button. (3) Make sure that the following options are checked/selected: • Include for Table ➤ Properties ➤ Relationships • Include for Fields ➤ Names, Data Types, Sizes and Properties • Include for Indexes ➤ Names and Fields (4) Required table design is displayed on screen and can be printed.

Task 2 (b) also requires a printout or hardcopy of the relationships.

o   Printing Relationships in FileMaker 8.

(1)   Select the "Define" option from the File menu and then select the "Database" option from the sub-menu.
(2)   Click on the Relationships tab then click on the Print button.

o   Printing Relationships in Access

(1)   Open the Relationships window.
(2)   Select the "Print Relationships" option from the File menu.

3	Printout of report.
4	Printout of report.
5	Hardcopy that clearly shows use and details of macro or script (again, available through Documenter in Access – simply change options in dialogue box).
6(b)	Printouts of spreadsheet showing data and formulae.
7	Screenshot of conditional formatting dialog.
8	Screenshots of custom list creation and use in sort.
9	Printouts of macro scripts.
10	Screenshots to provide evidence as required.

Screenshots for multiple tasks may be combined into a single page/document but should be clearly labelled as to which task each screenshot is evidence for.

Section 2

Coursework Task

Coursework Task: The Professional Association of Fitness Instructors (PAFI)

Higher Information Systems Coursework Task 2011-2012

Background

The Professional Association of Fitness Instructors (PAFI) is an organisation that delivers courses and issues certificates for fitness instructors. Courses are run at several venues throughout Scotland. All venue details are stored as part of a relational database in a table called **Venue**. Venue names are unique.

Fitness instructors register with PAFI and their contact details are stored in a **Member** table. Members are allocated a unique ID.

The details of the courses that PAFI delivers are stored in a **Course** table. Course IDs are unique. Each course can only be run in one venue, although the same venue can host many courses. Although courses may have the same title, each course can only be run at a specific level – Level 1, Level 2 or Level 3.

For example:
Course 456   Circuit Training   Level 1
Course 557   Circuit Training   Level 3

At the end of a course members are assessed. Those who pass are awarded certificates depending on how well they have performed. The certificates are awarded at Platinum, Gold or Silver level. PAFI stores the details of certificates awarded to members in a table called **Certificate**.

PAFI use a relational database to manage this information.

The relational data model is shown on the next page.

Entities

The resulting data model is shown below where primary keys are shown in **bold and underlined**, while asterisks (*) indicate foreign keys.)

Member   (**Member ID**, Forename, Surname, MemberAddress, MemberTown, MemberPostcode, DateofBirth)

Course   (**CourseID**, CourseTitle, CourseLevel, CourseDate, VenueName*)

Venue   (**VenueName**, VenueAddress, VenueCity, VenueTelephone)

Certificate (**MemberID***, **CourseID***, AwardLevel, AwardDate)

The entity-relationship diagram for the system is shown below.
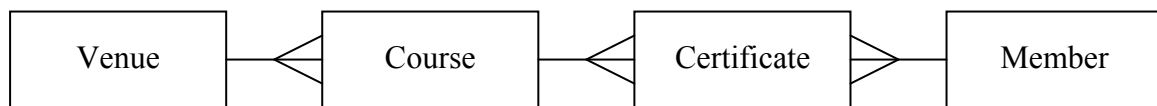
A data dictionary has been produced prior to implementation in a relational database. Part of this is shown below.

Data Dictionary

Entity	Attribute	PK/ FK	Data Type/Size	Unique	Required	Validation
Member	MemberID	PK	Text (7)	Y	Y	
	Forename		Text (30)	N	Y	
	Surname		Text (30)	N	Y	
	MemberAddress		Text (30)	N	Y	
	MemberTown		Text (15)	N	Y	
	MemberPostcode		Text (8)	N	Y	
	DateofBirth		Date	N	Y	
Course	CourseID	PK	Number	Y	Y	
	CourseTitle		Text (30)	N	Y	
	CourseLevel		Number	N	Y	1 or 2 or 3
	CourseDate		Date	N	Y	
	VenueName	FK	Text (30)	N	Y	Lookup from Venue
Venue	VenueName	PK	Text (30)	Y	Y	
	VenueAddress		Text (40)	Y	Y	
	VenueCity		Text (15)	N	Y	
	VenueTelephone		Text (12)	N	Y	
Certificate	MemberID	PK/FK	Text (7)			
	CourseID	PK/FK	Number			
	AwardLevel		Text (8)	N	Y	
	AwardDate		Date	N	Y	

Task		Evidence Required
1	Your teacher/lecturer will provide you with a partially completed data dictionary for the Certificate table. Using the background information provided, complete the data dictionary for the Certificate table by making appropriate entries in the shaded areas as indicated.	Completed data dictionary (Proforma 1)

You must now submit your answer to Task 1 to your teacher/lecturer.

Before attempting the tasks in this section ask your teacher/lecturer for a <u>completed data dictionary</u>.

You will also need access to pre-prepared database tables.

You **MUST** complete tasks in the sequence indicated.

Task			Evidence Required
2	Database tables have been created for the Venue, Member and Course tables.		
	(a)	Using the completed data dictionary issued by your teacher/lecturer, create the Certificate table. You should pay particular attention to: - data type (text size) - required - validation – where appropriate ensure that only valid values may be entered - primary and foreign keys	Hardcopy (printout or screenshots) of table structure including field types, validation checks etc.
	(b)	Set up/edit the relationships between all the tables as indicated by the entity-relationship diagram.	Hardcopy (printout or screenshots) of relationships between tables.

You must now submit all hardcopies for Task 2 to your teacher/lecturer.

Ask your teacher/lecturer for the <u>completed</u> database. This database must be used to carry out Tasks 3-5.

A market researcher from PAFI was interested in investigating the popularity of courses. The following report was produced.

Number of certificates

Course Title	Number of certificates
Advanced Fitness	23
Basic Anatomy	6
Basic Fitness	20
Basic Nutrition	3
Circuit Training	15

The researcher now wants a similar list but this time it should show the number of certificates awarded to each member. The list should be ordered in alphabetical order of surname.

Task		Evidence Required
3	Using appropriate database functions, create a report that displays the total number of Certificates awarded to each member. The report data should be ordered by surname of the member. Your report should include only the full name (forename and surname) of the member and the total number of certificates awarded.	Printout of report/layout

PAFI have been monitoring which of the venues has been awarding the most certificates and created the report shown below.

Awards per Venue

VenueName	No of Awards
Ayr Training Centre	8
Dundee Sports Studio	20
Elite Fitness	23
Fit for Life	18
Fitness Academy (Edinburgh)	14
Fitness Academy (Glasgow)	19
Gymworld	32
Northern Leisure Centre	15

They have decided that the report does not provide enough detail and have asked you to improve the information shown by displaying a breakdown of how many members were awarded certificates for each course at each level in each venue. The total number of certificates at each venue should be included. A sample layout has been provided below.

Details of Courses and Awards at each Venue

Venue Name	Course Level	Course Title	Number of Certificates
Ayr Training Centre			
	2		
		Kettlebell Training	2
		Strength and Conditioning	6
		Total for Venue	8
Dundee Sports Studio			
	1		
		Treating Sports Injuries	4
	2		
		Intermediate Spinning	8
		Using the Absmaster	8
		Total for Venue	20
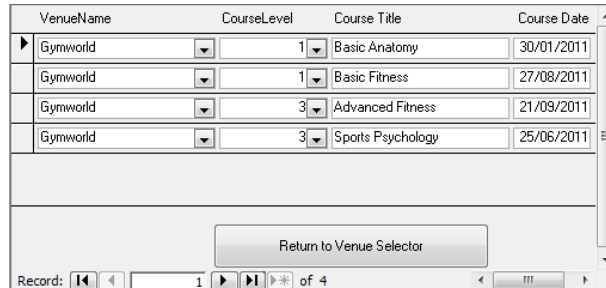
Task		Evidence Required
4	Create a report as follows: • Show, for each venue, the number of certificates they have awarded for each level of each course. • All data should be in alphabetical or ascending order. • Include the venue name, the level of the course, the name of each course, the number of certificates for each course and the total number of certificates for each venue.	Printout of report/layout

The market researcher thinks it would be helpful to view a list of courses that are held at each venue. They have decided to create a Venue Selector form/layout where each venue is listed. When a specific venue is chosen the Venue Selector screen closes and is replaced by a list of all courses at the chosen venue. The list of Courses also includes a link back to the Venue Selector screen, as is shown below using the "Gymworld" venue as an example.

Fig (a) Venue Selector Form   *Fig (b) Courses at chosen venue*

Task		Evidence Required
5	Your PAFI database already includes the Venue Selector form shown in *Fig (a)* above. Choose **one** venue and create, using a macro or script, a navigational link to a separate form/layout that shows only the courses available from that venue, as shown in Fig (b). Include on this form/layout a link back to the Venue Selector screen, again through the use of a macro or script. **Each navigational link should close the current form/layout and open the selected form/layout.**	Printout of report/layout Printout of macros/ scripts used to control navigational features

Ask your teacher/lecturer for a copy of the database PAFI Task 6. You must use this new copy for the following task.

The market researcher wants to carry out some financial operations on the data from the PAFI database. The data from the report on the number of certificates awarded at each venue was exported to a spreadsheet. Details about the price of each course and course income for each venue were added. Subtotals were calculated for each venue and formatting was then applied. The final spreadsheet is shown below.

		A	B	C	D	E	F
	1	Venue Name	Course Level	Course Title	Course Price	No of certificates	Course Income
	2	Ayr Training Centre	2	Kettlebell Training	£160	2	£320.00
	3	Ayr Training Centre	2	Strength and Conditioning	£160	6	£960.00
	4	**Ayr Training Centre Total**					£1,280.00
	5	Dundee Sports Studio	1	Treating Sports Injuries	£100	4	£400.00
	6	Dundee Sports Studio	2	Intermediate Spinning	£160	8	£1,280.00
	7	Dundee Sports Studio	2	Using the Absmaster	£160	8	£1,280.00
	8	**Dundee Sports Studio Total**					£2,960.00
	9	Elite Fitness	2	Intermediate Spinning	£160	4	£640.00
	10	Elite Fitness	3	Advanced Fitness	£225	7	£1,575.00
	11	Elite Fitness	3	Core Stability	£225	12	£2,700.00
	12	**Elite Fitness Total**					£4,915.00
	13	Fit for Life	1	Basic Fitness	£100	6	£600.00
	14	Fit for Life	2	Power Club Training	£160	4	£640.00
	15	Fit for Life	2	Strength and Conditioning	£160	8	£1,280.00
	16	**Fit for Life Total**					£2,520.00
	17	Fitness Academy (Edinburgh)	1	Basic Fitness	£100	7	£700.00
	18	Fitness Academy (Edinburgh)	1	Treating Sports Injuries	£100	2	£200.00
	19	Fitness Academy (Edinburgh)	3	Advanced Fitness	£225	5	£1,125.00
	20	**(Edinburgh) Total**					£2,025.00
	21	Fitness Academy (Glasgow)	1	Circuit Training	£100	11	£1,100.00
	22	Fitness Academy (Glasgow)	2	Kettlebell Training	£160	3	£480.00
	23	Fitness Academy (Glasgow)	3	Core Stability	£225	5	£1,125.00
	24	**Total**					£2,705.00
	25	Gymworld	1	Basic Anatomy	£100	6	£600.00
	26	Gymworld	1	Basic Fitness	£100	7	£700.00
	27	Gymworld	3	Advanced Fitness	£225	11	£2,475.00
	28	Gymworld	3	Sports Psychology	£225	8	£1,800.00
	29	**Gymworld Total**					£5,575.00
	30	Northern Leisure Centre	1	Basic Nutrition	£100	3	£300.00
	31	Northern Leisure Centre	3	Circuit Training	£225	4	£900.00
	32	Northern Leisure Centre	3	Medicine Ball Training	£225	8	£1,800.00
	33	**Total**					£3,000.00
	34	**Grand Total**					£24,980.00
	35						
	36						
	37	Prices					
	38	Level	Price				
	39	1	100				
	40	2	160				
	41	3	225				
	42						

Task		Evidence Required
6	**You must use the new version of the database (PAFI Task 6) to carry out this task.** You are going to create the spreadsheet from the results of a query in the new database.	
	(a) Export the results from the query/layout named Task 6 into a spreadsheet package.	

	(b) In creating the spreadsheet you must:
	 • Create blank columns for Course Price and Course Income.
	 • Enter the details about the course prices:
	   Level 1 course - £100
	   Level 2 course - £160
	   Level 3 course - £225
	   into a lookup table.
	 • Use a lookup table and an appropriate formula to complete the Course Price column.
	 • Insert a formula to calculate Course Income from each course.
	 • Use an appropriate function of the spreadsheet package to automatically create and display the subtotals for each venue.
	 • Format the spreadsheet in the same way as the example given.
	 • Add a footer with your name and the date.
	 • Print your spreadsheet
	   To show the data
	   To show the formulae used
		Printouts of data and formulae

Ask your teacher/lecturer for the Spreadsheet file Certificates by Members.

Task		Evidence Required
7	Apply conditional formatting to this spreadsheet to shade the cells for each award level in a different colour/shade. For example platinum, gold, silver in successively lighter shades of grey.	Screenshot of dialog used to create this formatting.

Using a spreadsheet of this size can sometimes make analysing data difficult. One way to make analysing easier is to use a sort.

PAFI would like the spreadsheet sorted in order of award level with Platinum first, then Gold, then Silver. A normal alphabetic sort will not produce the correct result and so a custom sort order must be created.

Task		Evidence Required
8	Create a custom list with the values Platinum, Gold and Silver. Use this custom list to sort the data on award level with platinum first then gold then silver.	Screenshot to show evidence of custom list creation and use in sort.

Administrators at PAFI sometimes require to sort data in different ways on many columns. They use macros to make this tedious job a little easier.

Task			Evidence Required
9	(a)	Create a macro in this work book to sort the spreadsheet and assign it to a keyboard shortcut. The macro should sort in alphabetical order of Course Title, then alphabetical order of Venue Name.	
	(b)	Create a macro to sort the spreadsheet to show members' full names (Forename and Surname) in alphabetical order of Surname, then Forename and then for each member their courses in order of Course Level. Where more than one course has been passed at the same level the courses passed should be in alphabetical order. The following table may help you organise your sorts. The top of your spreadsheet should look similar to this . . .	Printouts of macro scripts

Table for 9(b):

Column	Order	Importance of Sort
Forename	Alphabetical	2
Surname	Alphabetical	1 (most important)
Course Level	Descending	3
Course Title	Alphabetical	4 (least important)

	A	B	C	D	E	F	
	Forename	Surname	Course Title	Course Level	Award Level	Award Date	
	Nathan	Albert	Power Club Training	2	Gold	29-Mar-11	F
	Nathan	Albert	Using the Absmaster	2	Silver	20-Apr-11	D
	Nathan	Albert	Treating Sports Injuries	1	Platinum	14-Aug-11	F
	Thomas	Albert	Advanced Fitness	3	Silver	26-Jan-11	F
	Thomas	Albert	Core Stability	3	Platinum	30-Jul-11	F
	Thomas	Albert	Medicine Ball Training	3	Gold	20-Mar-11	N
	Thomas	Albert	Intermediate Spinning	2	Silver	27-Jul-11	D
	Thomas	Albert	Kettlebell Training	2	Gold	21-Apr-11	F
	Thomas	Albert	Strength and Conditioning	2	Silver	23-Jan-11	A
	Thomas	Albert	Using the Absmaster	2	Silver	16-Apr-11	D
	Thomas	Albert	Basic Fitness	1	Gold	10-Jul-11	F
	Emily	Barnes	Core Stability	3	Silver	04-Aug-11	F
	Emily	Barnes	Sports Psychology	3	Silver	02-Jul-11	G
	Emily	Barnes	Strength and Conditioning	2	Gold	19-Jan-11	A
	Emily	Barnes	Treating Sports Injuries	1	Gold	06-Feb-11	D
	Samantha	Barnes	Advanced Fitness	3	Gold	28-Jan-11	F
	Samantha	Barnes	Advanced Fitness	3	Platinum	25-Sep-11	G
	Samantha	Barnes	Sports Psychology	3	Silver	03-Jul-11	G
	Josephine	Bauer	Advanced Fitness	3	Gold	25-Sep-11	G
	Josephine	Bauer	Circuit Training	1	Gold	05-Sep-11	F

You have become a member of PAFI and enrolled for a course. You are going to use personal information software to manage this.

Task			Evidence Required
10	(a)	PAFI will contact you with information regarding courses by email. • Create a folder to store all mail you receive from PAFI. • Create a rule/filter to automatically place all emails received from PAFI.co.uk into your new folder. • All email to PAFI regarding courses should be sent to courses@PAFI.co.uk. Add this as a new contact to your address book/contact list	
	(b)	Using personal information software create a calendar and add the following information about a course you have enrolled in. Course Title: Advanced Fitness Dates: 5, 12, 19 May Time: 9am – 12 noon Add the date of the Higher Information Systems examination. Print out a section of your calendar which shows these entries.	Printouts/screenshots to show evidence of each
	(c)	EITHER (i) To remind you about your examination use your calendar to set up a reminder/notification/alert to be emailed to you some days before the examination. OR (ii) Create a suitable signature to be included in emails which you send.	

Section 3

Marking Grid

Marking Grid

Name _____ **Date** _____

Task	Possible Marks	Actual Marks	Evidence	Comment
1	5		Completed data dictionary	
2(a)	5		Printout of table structure	
2(b)	2		Printout showing relationships	
3	5		Printout of report	
4	9		Printout of report	
5	4		Printout of macros/scripts	
6(a)	2		Export query	
6(b)	4		Lookup	
	2		Subtotals	
	2		Formatting	
7	2		Conditional format	
8	3		Custom sort	
9(a)	2		Macro	
9(b)	4		4 column sort	
10(a)	3		Email	
10(b)	4		Calendar	
10(c)	2		Notification/Signature	
	60			

Appendix 1

Task 1 Proforma

Name					
Data dictionary for Certificate entity					
Attribute	Keys	Data Type/Size	Uniq ue	Re qd	Validation
MemberID	PK/FK	Text (7)			
CourseID	PK/FK	Number			-
AwardLevel		Text (8)	N	Y	
AwardDate	-	Date	N	Y	

Appendix 2

Completed Data Dictionary

Only to be issued after completion and submission of Task 1

Entity	Attribute	Keys	Data Type/Size	Unique	Required	Validation
Member	MemberID	PK	Text (7)	Y	Y	
	Forename		Text (30)	N	Y	
	Surname		Text (30)	N	Y	
	MemberAddress		Text (30)	N	Y	
	MemberTown		Text (15)	N	Y	
	MemberPostcode		Text (8)	N	Y	
	DateofBirth		Date	N	Y	
Course	CourseID	PK	Number	Y	Y	
	CourseTitle		Text (30)	N	Y	
	CourseLevel		Number	N	Y	1 or 2 or 3
	CourseDate		Date	N	Y	
	VenueName	FK	Text (30)	N	Y	Lookup from Venue
Venue	VenueName	PK	Text (30)	Y	Y	
	VenueAddress		Text (40)	N	Y	
	VenueCity		Text (15)	N	Y	
	VenueTelephone		Text (12)	N	Y	
Certificate	MemberID	PK/FK	Text (7)	N	Y	Lookup from Member
	CourseID	PK/FK	Number	N	Y	Lookup from Course
	AwardLevel		Text (8)	N	Y	Platinum, Gold or Silver
	AwardDate		Date	N	Y	

Appendix 3

Detailed Marking Instructions

Strictly Confidential

Detailed Marking Instructions – Do not issue to candidates.

				Marks
1	Data Dictionary	5	Required: memberID/CourseID	1
			Unique Member ID/CourseID	2
			Lookup for MemberID/Lookup for CourseID	1
			Validation AwardLevel	1
2	Create Certificate table	5	Data type/size correct	1
			PK correct	1
			Required correct	1
			Validation correct – Lookups/FK	1
			Limit to list or correct rule	1
	Links between tables	2	3 correct one-to-many relationships 2 correct one-to-many relationships 0 or 1 correct	2 1 0
3	Report showing total number of certificates awarded to each member	5	Calculate total for each course (query)	2
			Sort surname ascending order	1
			Only required fields showing	1
			Layout (change total field name, field names ad data visible).	1
4	Report showing total number of certificates arranged by each promoter in each city	9	Grouped by Centre	1
			Grouped by level	1
			1st sort condition (Venue Ascending)	1
			2nd/3rd sort condition (Level Ascending/Course Ascending)	1
			Total number of Certificates for each course	1
			Only required fields	1
			Layout (change field names, field names and data visible)	1
			Total by venue	1
			Report completed with no help	1
5	Navigation links	4	Navigation link from selector to list of Certificates (close, filter, open)	2
			Navigation from list of Certificates to venue selector (close, open)	2

				Marks
6(a)	Export query	2	Query exported to spreadsheet With help	2 1
6(b)	Lookup	4	Lookup table created	1
			Range named or use of absolute references	1
			Lookup formula correctly applied to correct column with help	2 1
	Subtotals	2	Create subtotals automatically With help	2 1
	Formatting	2	Currency Alignment Columns names appropriately	All 3–2 marks Any 2–1 mark
7	Conditional Format	2	Conditional format applied with 2 or 3 conditions 1 condition or with help	2 1 0
8	Custom Sort	3	Custom list created Sort using list With help	3 2 1
9(a)	Macro	2	Macro recoded and keyboard shortcut assigned	1
			All 3 sorts correct	1
9(b)	4 column sort	4	4 columns correct 3 columns correct or 4 columns but wrong order With help	4 2 1
10(a)	Email	3	Create folder	1
			Create rule/filter	1
			Create contact	1
10(b)	Calendar	4	Titles	1
			Dates	1
			Times	1
			Print calendar	1
10(c)	Notification	2	Email notification or signature set up With help	2 1

Task 3

Task 3

Forename	Surname	Number of Certificates
Nathan	Albert	3
Thomas	Albert	9
Emily	Barnes	4
Samantha	Barnes	3
Josephine	Bauer	2
Wallace	Bevins	4
Amity	Booker	4
Brent	Brooks	2
Brennan	Carrillo	6
Forrest	Cervantes	4
Dacey	Conrad	5
Sopoline	Dominguez	4
Hector	Flynn	6
Moana	Glover	3
Scarlet	Greene	2
Demetria	Hanson	6
Hayes	Hill	5
Charlotte	Hinton	9
Whoopi	Holcomb	6
Faith	Hooper	3
TaShya	Kelly	2
Susan	Leblanc	2
Aileen	Lester	1
Guy	Marsh	4
Fritz	Massey	4
Roberta	Mccall	1
Jolie	Morrell	4
Sheine	Moses	3
Madison	Munoz	4
Debra	Perkins	8
Charles	Pollard	3
Claudia	Porter	3
Judah	Rowland	3
Griffith	Simmons	3
Venus	Stafford	3
Chiquita	Stone	4
Marlene	Taylor	1
Dai	Whitney	2
Mechelle	Wooten	4

Task 4

Details of Courses and Awards at each Venue

Venue Name	Course Level	Course Title	Number of Certificates
Ayr Training Centre			
	2		
		Kettlebell Training	2
		Strength and Conditioning	6
		Total for Venue	**8**
Dundee Sports Studio			
	1		
		Treating Sports Injuries	4
	2		
		Intermediate Spinning	8
		Using the Absmaster	8
		Total for Venue	**20**
Elite Fitness			
	2		
		Intermediate Spinning	4
	3		
		Advanced Fitness	7
		Core Stability	12
		Total for Venue	**23**
Fit for Life			
	1		
		Basic Fitness	6
	2		
		Power Club Training	4
		Strength and Conditioning	8
		Total for Venue	**18**
Fitness Academy (Edinburgh)			
	1		
		Basic Fitness	7
		Treating Sports Injuries	2
	3		
		Advanced Fitness	5
		Total for Venue	**14**

Task 4 (continued)

Venue Name	Course Level	Course Title	Number of Certificates
Fitness Academy (Glasgow)			
	1		
		Circuit Training	11
	2		
		Kettlebell Training	3
	3		
		Core Stability	5
		Total for Venue	19
Gymworld			
	1		
		Basic Anatomy	6
		Basic Fitness	7
	3		
		Advanced Fitness	11
		Sports Psychology	8
		Total for Venue	32
Northern Leisure Centre			
	1		
		Basic Nutrition	3
	3		
		Circuit Training	4
		Medicine Ball Training	8
		Total for Venue	15

Task 5

Using named range

	A	B	C	D	E	F
1	Venue Name	Course Level	Course Title	Course Price	No of certificates	Course Income
2	Ayr Training Centre	2	Kettlebell Training	=VLOOKUP(B2,PriceGuide,	2	=E2*D2
3	Ayr Training Centre	2	Strength and Conditioning	=VLOOKUP(B3,PriceGuide,	6	=E3*D3
4	**Ayr Training Centre Total**					=SUBTOTAL(9,F2:F3)
5	Dundee Sports Studio	1	Treating Sports Injuries	=VLOOKUP(B5,PriceGuide,	4	=E5*D5
6	Dundee Sports Studio	2	Intermediate Spinning	=VLOOKUP(B6,PriceGuide,	8	=E6*D6
7	Dundee Sports Studio	2	Using the Absmaster	=VLOOKUP(B7,PriceGuide,	8	=E7*D7
8	**Dundee Sports Studio Total**					=SUBTOTAL(9,F5:F7)
9	Elite Fitness	2	Intermediate Spinning	=VLOOKUP(B9,PriceGuide,	4	=E9*D9
10	Elite Fitness	3	Advanced Fitness	=VLOOKUP(B10,PriceGuid	7	=E10*D10
11	Elite Fitness	3	Core Stability	=VLOOKUP(B11,PriceGuid	12	=E11*D11
12	**Elite Fitness Total**					=SUBTOTAL(9,F9:F11)
13	Fit for Life	1	Basic Fitness	=VLOOKUP(B13,PriceGuid	6	=E13*D13
14	Fit for Life	2	Power Club Training	=VLOOKUP(B14,PriceGuid	4	=E14*D14
15	Fit for Life	2	Strength and Conditioning	=VLOOKUP(B15,PriceGuid	8	=E15*D15
16	**Fit for Life Total**					=SUBTOTAL(9,F13:F15)
17	Fitness Academy (Edinburgh)	1	Basic Fitness	=VLOOKUP(B17,PriceGuid	7	=E17*D17
18	Fitness Academy (Edinburgh)	1	Treating Sports Injuries	=VLOOKUP(B18,PriceGuid	2	=E18*D18
19	Fitness Academy (Edinburgh)	3	Advanced Fitness	=VLOOKUP(B19,PriceGuid	5	=E19*D19
20	**Fitness Academy (Edinburgh) Total**					=SUBTOTAL(9,F17:F19)
21	Fitness Academy (Glasgow)	1	Circuit Training	=VLOOKUP(B21,PriceGuid	11	=E21*D21
22	Fitness Academy (Glasgow)	2	Kettlebell Training	=VLOOKUP(B22,PriceGuid	3	=E22*D22
23	Fitness Academy (Glasgow)	3	Core Stability	=VLOOKUP(B23,PriceGuid	5	=E23*D23
24	**Fitness Academy (Glasgow) Total**					=SUBTOTAL(9,F21:F23)
25	Gymworld	1	Basic Anatomy	=VLOOKUP(B25,PriceGuid	6	=E25*D25
26	Gymworld	1	Basic Fitness	=VLOOKUP(B26,PriceGuid	7	=E26*D26
27	Gymworld	3	Advanced Fitness	=VLOOKUP(B27,PriceGuid	11	=E27*D27
28	Gymworld	3	Sports Psychology	=VLOOKUP(B28,PriceGuid	8	=E28*D28
29	**Gymworld Total**					=SUBTOTAL(9,F25:F28)
30	Northern Leisure Centre	1	Basic Nutrition	=VLOOKUP(B30,PriceGuid	3	=E30*D30
31	Northern Leisure Centre	3	Circuit Training	=VLOOKUP(B31,PriceGuid	4	=E31*D31
32	Northern Leisure Centre	3	Medicine Ball Training	=VLOOKUP(B32,PriceGuid	8	=E32*D32
33	**Northern Leisure Centre Total**					=SUBTOTAL(9,F30:F32)
34	**Grand Total**					=SUBTOTAL(9,F2:F32)
35						
36	Prices					
37	Level	Pr1ce				
38	1	100				
39	2	160				
40	3	225				

Task 5 (continued)

Using absolute References

	A	B	C	D	E	F
1	Venue Name	Course Level	Course Title	Course Price	No of certificates	Course Income
2	Ayr Training Centre	2	Kettlebell Training	=LOOKUP(B2,A$38:B$40)	2	=E2*D2
3	Ayr Training Centre	2	Strength and Conditioning	=LOOKUP(B3,A$38:B$40)	6	=E3*D3
4	Ayr Training Centre Total					=SUBTOTAL(9,F2:F3)
5	Dundee Sports Studio	1	Treating Sports Injuries	=LOOKUP(B5,A$38:B$40)	4	=E5*D5
6	Dundee Sports Studio	2	Intermediate Spinning	=LOOKUP(B6,A$38:B$40)	8	=E6*D6
7	Dundee Sports Studio	2	Using the Absmaster	=LOOKUP(B7,A$38:B$40)	8	=E7*D7
8	Dundee Sports Studio Total					=SUBTOTAL(9,F5:F7)
9	Elite Fitness	2	Intermediate Spinning	=LOOKUP(B9,A$38:B$40)	4	=E9*D9
10	Elite Fitness	3	Advanced Fitness	=LOOKUP(B10,A$38:B$40)	7	=E10*D10
11	Elite Fitness	3	Core Stability	=LOOKUP(B11,A$38:B$40)	12	=E11*D11
12	Elite Fitness Total					=SUBTOTAL(9,F9:F11)
13	Fit for Life	1	Basic Fitness	=LOOKUP(B13,A$38:B$40)	6	=E13*D13
14	Fit for Life	2	Power Club Training	=LOOKUP(B14,A$38:B$40)	4	=E14*D14
15	Fit for Life	2	Strength and Conditioning	=LOOKUP(B15,A$38:B$40)	8	=E15*D15
16	Fit for Life Total					=SUBTOTAL(9,F13:F15)
17	Fitness Academy (Edinburgh)	1	Basic Fitness	=LOOKUP(B17,A$38:B$40)	7	=E17*D17
18	Fitness Academy (Edinburgh)	1	Treating Sports Injuries	=LOOKUP(B18,A$38:B$40)	2	=E18*D18
19	Fitness Academy (Edinburgh)	3	Advanced Fitness	=LOOKUP(B19,A$38:B$40)	5	=E19*D19
20	Fitness Academy (Edinburgh) Total					=SUBTOTAL(9,F17:F19)
21	Fitness Academy (Glasgow)	1	Circuit Training	=LOOKUP(B21,A$38:B$40)	11	=E21*D21
22	Fitness Academy (Glasgow)	2	Kettlebell Training	=LOOKUP(B22,A$38:B$40)	3	=E22*D22
23	Fitness Academy (Glasgow)	3	Core Stability	=LOOKUP(B23,A$38:B$40)	5	=E23*D23
24	Fitness Academy (Glasgow) Total					=SUBTOTAL(9,F21:F23)
25	Gymworld	1	Basic Anatomy	=LOOKUP(B25,A$38:B$40)	6	=E25*D25
26	Gymworld	1	Basic Fitness	=LOOKUP(B26,A$38:B$40)	7	=E26*D26
27	Gymworld	3	Advanced Fitness	=LOOKUP(B27,A$38:B$40)	11	=E27*D27
28	Gymworld	3	Sports Psychology	=LOOKUP(B28,A$38:B$40)	8	=E28*D28
29	Gymworld Total					=SUBTOTAL(9,F25:F28)
30	Northern Leisure Centre	1	Basic Nutrition	=LOOKUP(B30,A$38:B$40)	3	=E30*D30
31	Northern Leisure Centre	3	Circuit Training	=LOOKUP(B31,A$38:B$40)	4	=E31*D31
32	Northern Leisure Centre	3	Medicine Ball Training	=LOOKUP(B32,A$38:B$40)	8	=E32*D32
33	Northern Leisure Centre Total					=SUBTOTAL(9,F30:F32)
34	Grand Total					=SUBTOTAL(9,F2:F32)
35						
36	Prices					
37	Level	Pr1ce				
38	1	100				
39	2	160				
40	3	225				