Coursework Task

Intermediate 2 Information Systems

Valid for session 2012/2013 only

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Introduction

Organisation and Conditions for Assessment

Organisation and Conditions for Assessment

The assessment is designed to test each candidate's ability to apply knowledge and understanding and practical skills, developed through study of the Database Systems and Using Information Units. The mark out of 30 should be submitted to SQA unscaled. This will be combined with the examination mark out of 70 to establish the candidate's overall grade of award. This mark should also be used in preparation of estimate grades.

The notional design length for the assessment is 8 - 10 hours. However, a candidate may be allowed longer than this if required.

The assessment is to be undertaken under "open book" conditions, but under supervision by the teacher/lecturer to ensure that the work submitted is the candidate's own work. The teacher/lecturer may give the candidate hints 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 the data files provided with the electronic distribution of the task. These can be downloaded from the SQA secure website.

The files to be downloaded should include:

- The 2012/2013 Intermediate 2 Information Systems Coursework Task
- Leaflet tasks
 - o Speaker1 image file
 - o Speaker2 image file
 - o Speaker3 image file
 - o CAS Logo image file
 - o Jobs image file
 - o Presentation 1 Fact File (text file)
 - o Presentation 2 Fact File (text file)
 - o Presentation 3 Fact File (text file)
 - o Convention detail (text file)
- Address Labels tasks
 - Schools (text file)
- Spreadsheet tasks
 - o Attendance details (spreadsheet file)
 - o Presentation 1 (pdf style)
 - o Presentation 2 (pdf style)
 - o Presentation 3 (pdf style)
- Database task
 - o ConventionDB task 6-8 database

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, database files for Microsoft Access and FileMaker Pro have been provided for this task. The files contain or represent a number of tables with data entered. The appropriate file(s) should be made available to the candidates.

Centres using alternative relational database software can use the accompanying data files, which contain tab-delimited data required for the tables. The centre should set up tables as appropriate

within the database software and import the data provided. The resulting database file should then be made available to the candidates.

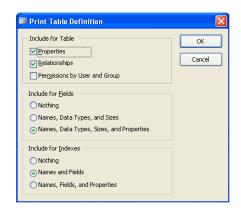
Candidates should be given a copy of the marking grid before starting the task so that they are aware of the mark distribution for each part.

Special Arrangements for Intermediate 2 Coursework 2012-2013

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) files as well as a text (tab) delimited file have been provided. Centres using other systems will be required to create the database from the tab separated file provided. This file can also be used if centres encounter any difficulties with the supplied Access or Filemaker databases.
- Candidates are required to set up both tables in the database. Candidates will be required to submit a printout of the Documenter (or equivalent screen shots) of both the School table and the Delegate table as evidence for Task 5. After completing tasks 1-5, their work must be submitted and not returned. Candidates must not be given access to the ConventionDB Task 6-8 database until they have submitted answers to prior tasks.
- Task 5 asks candidates to print out a copy of the design of the tables. This is to provide
 evidence that the correct field types have been used and all necessary validation checks
 implemented. The assessor should help candidates produce this printout without penalty.
- Task 5 asks candidates to print out a copy of the relationship between the tables. The assessor should help candidates produce this printout without penalty.
- Candidates will **not** use their database structures to complete Tasks 6-8. Instead, centres should issue candidates with the fully populated database.
- The **ConventionDB Task 6-8** is a complete implementation of the system. This working database should be issued to candidates **after** Task 5 has been submitted. Candidates **must** use this working database to complete Tasks 6-8.
- Additional notes follow which detail how candidate evidence is to be generated.
 - In FileMaker Pro, 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.
 - 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) Click on OK
- (5) The required table design is displayed on screen and can be printed.



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

Alternatively, screendumps of the evidence would also be acceptable.

Section 1

Coursework Task

Intermediate 2 Information Systems Coursework Task 2012/2013

The Careers Assistance Service (CAS) offers guidance to school pupils about education and job opportunities available after leaving school.

Every year, CAS holds a careers convention that includes a range of presentations with guest speakers, information exhibits hosted by universities, colleges, employers and trade organisations as well as information about funding options and scholarships.

CAS requires the following items to be produced:

- a double-sided leaflet containing details about the convention
- address labels to enable CAS to send the leaflets to each school
- a spreadsheet to summarise the number of delegates attending each presentation
- a database to store details of pupils attending the convention

What you have to do

	Tasks	Evidence Required
1	You have to create a double-sided leaflet advertising the careers convention.	
	The leaflet must follow these guidelines:	
	It must use a folded, double-sided layout similar to one shown below	
	It must contain all the information provided for the convention:	
	o CAS logo	
	o Jobs image	Double-sided folded
	o Convention details	leaflet
	Fact file for each presentationPhotographs of each speaker	
	It must use consistent headings and subheadings for each section of the leaflet	
	It must use suitable fonts, sizes and styles	
	• It must use at least three publishing features from:	
	o drop capitals	
	o rotated text	
	o line spacing	
	text wrapborders and shading	
	Note: Your teacher/lecturer will provide you with the text files and images to be included. You may use additional images from other sources if you wish.	

What you have to do (continued)

	Tasks	Evidence Required	
2	You have to create a set of address labels s leaflets to each school.		
	Your teacher/lecturer will have provided y file that contains a list of delegates, school Add your own name and school details to the	Screenshot showing label details set up.	
	Using the schools file and the label details and print address labels for a mass mailing The label details are:	Screenshot/printout showing merge fields for one label. Printout showing the	
	Page size and orientation	A4 portrait	address labels – one label
	Label height and vertical pitch	4cm	for each school.
	Label width and horizontal pitch	6cm	You do not need to print
	Top Margin	1cm	sticky labels. Plain paper
	Side margin	1cm	will suffice.
	Number across	will suffice.	
	Number down		
	You do not need to print sticky labels. Pla		

What you have to do (continued)

Tasks	Evidence Required
CAS keeps track of the number of delegates from each school	
attending each presentation using a spreadsheet. The first	
worksheet labelled Presentation1, contains details of delegates	
attending this presentation. Similarly for worksheets	
Presentation2 and Presentation3. The last worksheet will	
provide the convention organisers with a summary of the	
delegates attending each presentation.	
A B C	
1 Presentation 1 Mrs J Smith	
2	
3 School Number of Delegates	
4 Whiteford Academy 6	
5 Oakenwash High School 9	
6 Dunshield Academy 12	
7 Oakenfarm Academy 4	
8 Fivebury High School 5	
9 Grovethorpe Secondary	
10 Inching Community School 6	
11 Tipperbrook Academy 4	
12 Halshott Secondary 8	
13 Querngree Academy 3	
14 Braechester High School 14	
15 Cavenwood Community School 2	
16 Cowanholm Academy 5	
17 St Carnwick Secondary 7	
18 Maddihead High School 2	
19 Thirsmouth Secondary 9	
20 Berbarrow School for Girls 11	
21 Oxshaw Road High School 14	
22 Westun College 11	
23 Southbon Gate School 10	
24	
Presentation 1 / Presentation 2 / Presentation 3 / Summary /	

What you have to do (continued)

		asks		Evidence Required
3	Your teacher/lecturer will have	provided you with a	copy of the	
(contd)	Attendance details spreadsheet.			
	You will have to use this spread worksheet to include formulae t Calculate (Count funct attending each presentation for each presentation)			
	The organisers would like to be column A to open a file summar Your teacher/lecturer will have Presentation1, Presentation2, Proceed to a formula using the hypersummarizing each of the difference Successful completion of this shown below.	esentations. files, en the files	Two printouts of summary sheet – one showing values and one showing formulas.	
	A	В	С	
	1 Summary			
		Number of Schools	Total	
	2	Attending	Delegates	
	3 Presentation 1	142		
	4 Presentation 2			
	5 Presentation 3			
	6			
	7	Summary /		

You must now submit Tasks 1-3 to your teacher/lecturer

CAS wants to store details about the schools and the student delegates in a relational database. This will make it easy to retrieve information about delegates attending the convention and answer questions like "How many boys are attending the convention?".

CAS has designed the tables required for the database.

School table

Field Name	Field Type	Field Size	Key	Sample Data
School ID	Text	3	Primary Key	S19
School Name	Text	35	No	Oakenfarm Academy
Address	Text	30	No	Shire Oak Road
District	Text	20	No	Snead
Town	Text	20	No	Oaken
Post Code	Text	8	No	SY21 8JL

Delegate table

Field Name	Field Type	Field Size	Key	Validation	Sample Data
Delegate Ref	Text	4	Primary Key		D101
Forename	Text	30	No		Sally
Surname	Text	30	No		Morrison
Gender	Text	6	No	Restricted choice (only Male or Female)	female
Date of Birth	Date		No		17/03/1995
Presentations Attending	Number		No		2
School ID	Text	3	Foreign Key	Link to School table	S19

What you have to do (continued)

	Tasks	Evidence Required
4	Using a relational database application, create a new database file and set up the School table and the Delegate table . You should use the design shown above.	
5	Print a copy of your design for both tables in the database. This should show the field types, field sizes and validation checks.	Printout/screendump of the School table and Delegate table design showing field types, field sizes and validation checks.
	(If you are unsure how to do this, your teacher/lecturer will be able to help you.)	Printout/screendump of the relationship window showing the link between the two tables.

Now must now submit Tasks 4 and 5 to your teacher/lecturer.

Your teacher/lecturer will provide you with the database file ConventionDB task 6-8. You must use this version to complete tasks 6, 7 and 8.

	Tasks	Evidence Required
6	Create an attractive and user friendly form/layout to display all the details for one delegate. Include all the details of their school. Your layout should be formatted so that the name of the delegate, their school name and the number of presentations they are attending clearly stands out. Produce a one page printout using this form/layout ensuring all data can be clearly seen.	Printout of the form/layout showing all details.
7	One of the special exhibits at the convention is aimed at girls aged 18 in the year 2013. Produce a report/layout showing the appropriate delegates. The report data should be listed in alphabetical order of school, with delegates from each school also listed alphabetically. The printout should display only the following fields: Forename, Surname, School Name and Date of birth.	Sorted printout of all 18 year old girls in a report/layout as specified.
8	The administrators of the convention need a list of all delegates from Whiteford Academy and Halshott Secondary schools who are registered for at least 2 presentations. Produce a printout of a report/layout showing the appropriate list of delegates. The report data should be listed in order of the number of presentations they are attending, least first. The printout should display only the following fields: School Name, Forename, Surname, Date of birth and Presentations Attending.	Sorted printout of all delegates from Whiteford Academy and Halshott Secondary schools attending at least 2 presentations in a report/layout as specified.

(30 marks)

Collect all printouts in the order they were asked for. Ensure your name and task number is printed on each report before handing to your teacher/lecturer.

Section 2

Marking Information

Marking Grid

Name _____ Date ____

	Topic		Possible Marks	Marks Gained	Comment
	Create the	Leaflet as specified	3,2,1,0	Gameu	
Task 1	leaflet	Publishing features	3,2,1,0		
Task 2	Address Labels Printed Labels		4,3,2,1,0		
		Calculate the number of schools for each presentation	1,0		
Task 3	Spreadsheet	Calculate the number of delegates for each presentation	1,0		
		Link summary page to presentation details	2,1,0		
		Print spreadsheet summary	1,0		
			2.1.0		
	Create the database	Creation of tables	2,1,0		
Tasks 4–5		Restricted Choice	1,0		
		Link tables	1,0		
Task 6	Form/layout	Printed layout	2,1,0		
	1	T			
		Correct Search	2,1,0		
Task 7	Report	Correct Sort	2,1,0		
		Correct Report Printed	1,0		
		Correct Search	2,1,0		
Task 8	Report	Correct Sort	1,0		
- HUAR O	report	Correct Report Printed	1,0		
	Overall Total		30		

Appendix 1

Detailed Marking Instructions

CONFIDENTIAL – not to be issued to candidates Detailed Marking Guidelines

The following guidelines assume that all work was carried out by the candidate on their own (or with the assistance of open book materials). Any assistance by the teacher/lecturer should be reflected in a reduction of the number of marks awarded.

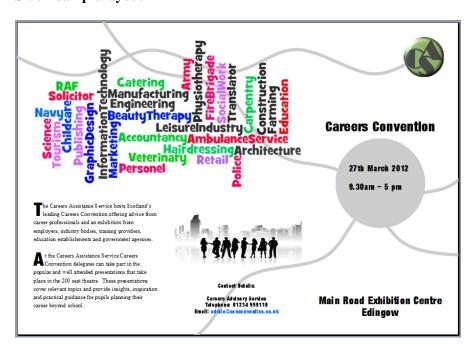
Task 1	Create the leaflet	Create the leaflet	3,2,1,0	 Leaflet created as specified Appropriate double-sided, folded layout (1 mark) All body text and headings included and formatted with appropriate and consistent font, size, style for each (1 mark) CAS logo, jobs image and speaker images included (1 mark)
		Publishing features	3,2,1,0	Any 3 from
		Own contact details	1,0	Add extra line/row of details
m 1.0	Create	Design label	1,0	Set up specialized label size
Task 2	address labels	Create label	1,0	Insert merge fields
	140015	Print the labels	1,0	One label per school printed

		Calculate number of schools for each presentation	1,0	 Correct use of COUNT function on summary worksheet to count number of schools for each presentation eg =COUNT('Presentation 1'!B4:B23) Notes: 1 mark for correct range in COUNT function referring to appropriate presentation worksheet and correct cell range 0 marks if function used on individual presentation worksheet Three correct COUNT formulas used on the summary worksheet required for 1 mark
Task 3	Spreadsheet	Calculate number of delegates for each presentation	1,0	 Correct use of SUM function on summary worksheet to count number of schools for each presentation =SUM('Presentation 1'!B4:B23) Notes: 1 mark for correct range in SUM function referring to appropriate presentation worksheet and correct cell range 0 marks if function used on individual presentation worksheet Three correct SUM formulas used on the
		Link summary page to presentation	2,1,0	 summary worksheet required for 1 mark Candidates MUST use the hyperlink function. Simply inserting a hyperlink would not be awarded the marks. Correct use of HYPERLINK function to create links between each presentation file and the summary page eg =HYPERLINK("C:\Users\fred\Desktop\Presentation 1.pdf", "Presentation 2") 1 mark for path/filename 1 mark for display text Three correct HYPERLINK formulas used on the summary worksheet required for 1 mark
		Print spreadsheet summary	1,0	 One printed version showing answers to formula calculations with row/column headings visible and One printed version showing formulas used visible
		Creation of tables	2,1,0	Accurate creation of
				all tables and field names and PKs all field types and sizes
Task 4–5	Create the database	Restricted choice	1,0	all field types and sizes Gender set to restricted choice – only male, female values accepted Table Value in the state of the st
		Link tables	1,0	Tables linked without teacher/lecturer help using School ID

Task 6	Form/Layout	Printed Layout	2,1,0	 One page layout created without help. All fields from both tables should be clearly visible. (School ID should only appear once) (1 mark) Appropriately designed with Forename, Surname, School Name and Presentations Attending standing out using larger size or different style or colour etc (1 mark)
		Correct Search	2,1,0	Complex search for • Gender = female • Date of Birth >=1/1/1995 AND <=31/12/1995 or • Date of birth contains *1995*
Task 7	Report	Correct Sort	2,1,0	Complex sort both ascending (2 marks) • School Name ascending • and then Surname ascending Simple sort only = 1 mark Complex sort with 1 ascending and 1 descending = 1 mark Otherwise = 0 marks
		Report Printed	1,0	School name, Forename, Surname, Date of Birth fields included and clearly visible
		Correct Search	2,1,0	Complex search for • Presentations Attending >=2 • School Name = Halshott Secondary OR Whiteford Academy
Task 8	Report	Correct Sort	1,0	Sort • Presentations Attending Ascending order
		Report Printed	1,0	School Name, Forename, Surname, Date of Birth and Presentations Attending fields included and clearly visible.

Total Marks	30	

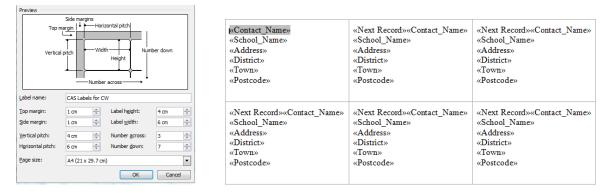
Task 1 Side 1 sample layout



Side 2 sample layout



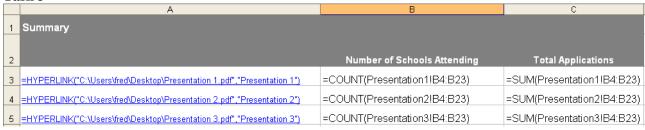
Task 2 Screenshot showing label set up Printout/Screenshot showing merge fields



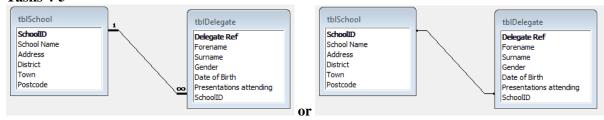
Single A4 page with 21 address labels (including own contact details)

∄			
Mrs C White	Miss D Fruser	Mr F Godden	
Whiteford Academy	Oakenwish High School	Dunshield Academy	
Denhow Road North	Hindhead Road	Overton Circle	
Milloom	Minyston	Hillycraig	
Whiteford	Oaken	Dunkiln	
IV27 2FB	SO42 8UD	LA18 6AJ	
Miss A Axiz	Miss B Alonso	Mrs C Clarke	
Oikenfum Acidemy	Fivebury High School	Grovethorpe Secondary	
Shire Oak Road	Crown Street	Fulford Road	
Snead		Reliston	
	Ledridge		
Oiken	Fivecourt	Grove	
SY21 8/L	IP17 2DS	SY13 9WP	
No. W.N. Ward	No. 7 Charles	15. 0 D	
Mrs K MacKenzie	Miss L Schmitt	Mr G Franova	
Inching Community School	Tipperbrook Academy	Halshott Secondary	
Main Rd	Boothum Terrace	Ross Road	
Drawkeys	Holton	Clacky	
Inching	Keithmore	Cairness	
NE21 6HF	CF81 1JJ	NR29 5AF	
Miss S Mirren	Mr L James	Mr G Scott.	
Quangree Academy	Bruechester High School	Coverawood Community School	
Gordon Terrace	Caradon Hill	Guildry Street	
Razmire	Sheetlebung	Governo	
Loosley	Penterback	Cavenwood	
L66 4ST	S030 1WA	PA67 600	
200 101	0000 11721		
Miss P Koli	Mrs J Smythe	Mr O Orem	
Cowmholm Academy	St Carrovick Secondary	Maddihead High School	
Town Lane	Long Street	Helland Bridge	
Parkrow	Hanfam	-	
Coven	Scole	Bighall	
		Chievaig	
WC99 5TA	LL36 7YU	LE7 1AH	
11. W. W. A.	16 P.P	Mr. T.Direct	
Ms W Hurkins	Ms R Rose	Ms E Rivers	
Thirsmouth Secondary	Berbarrow School for Girls	Oxshaw Road High School	
Quay Street	Farbura Terrace	Oxford Rd	
Manby	West Barrow	East, Oxshaw	
East Bolder	Barrowston	Oxshaw	
DE65 ONE	SA4 4ZL	OMB 2YH	
Mr F Fofana	Miss M Elsdon		
Westum College	Southbon Gute School		
Jesmond Rd	Warner Avenue		
West Barrow	Stought.		
West Livy	Oldston		
SE15 1ET	KA6 0XX		
2512 151			

Task 3



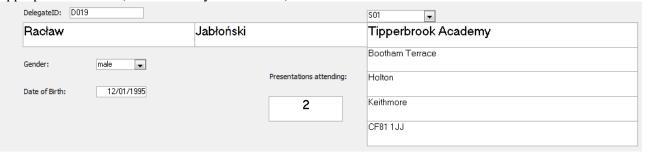
Tasks 4-5



Task 6 Example A – 2 marks

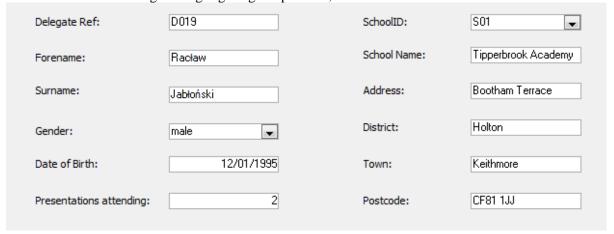
Good consideration of design, all fields visible.

Delegate forename and surname, school name and Presentations attending clearly stand out using appropriate features (size/colour/style/border etc)



Example B - 1 mark

No consideration of design or highlighting as specified, but all fields included are visible.



Task 7: 28 records

Task 7 Girls aged 18

School Name	Surname	Forename	Date of Birth
Berbarrow School for Girls	Baldwin	Ruby	21/06/1995
Berbarrow School for Girls	Dickson	Ashleigh	16/04/1995
Berbarrow School for Girls	Gibbs	Keira	10/10/1995
Berbarrow School for Girls	Mills	Jessica	21/07/1995
Braechester High School	Curtis	Eloise	12/11/1995
Braechester High School	Hunter	Olive	29/03/1995
Braechester High School	Todd	Laura	26/05/1995
Cavenwood Community School	Campb ell	Molly	30/09/1995
Cavenwood Community School	Dąbrowski	Oliwia	01/01/1995
Cavenwood Community School	Król	Bronisława	30/01/1995
Halshott Secondary	Bames	Lilly	14/09/1995
Halshott Secondary	Bryan	Natasha	07/04/1995
Halshott Secondary	Rob erts	Freya	30/05/1995
Inching Community School	Borkowska	Julita	15/06/1995
Inching Community School	Craw ford	Morven	17/12/1995
Inching Community School	Griffiths	Madeleine	22/07/1995
Inching Community School	Saunders	Bethany	06/01/1995
Oakenfarm Academy	May	Ellie	05/07/1995
Oakenfarm Academy	Olszewska	Roksana	27/02/1995
Oakenwash High School	Black	Chanelle	29/03/1995
Oakenwash High School	Kowalska	Elżbieta	19/09/1995
Oakenwash High School	Lyons	Georgia	21/08/1995
Oakenwash High School	Muir	Lena	22/07/1995
Oxshaw Road High School	Berry	Isabel	06/06/1995
Oxshaw Road High School	Hay	Lana	16/10/1995
Southbon Gate School	Duda	Małgorzata	29/01/1995
S ou thb on Gate School	Fleming	May	16/03/1995
Southbon Gate School	Hunter	Annabel	10/04/1995

Task 8: 12 records

Halshott and Whiteford delegates attending 2 or 3 presentations

School Name	Forename	Surname	Date of Birth	Presentations attending
Halshott Secondary	Lilly	Barnes	14/09/1995	2
Halshott Secondary	Natasha	Bryan	07/04/1995	2
Halshott Secondary	Harley	Sharp	04/09/1995	2
Whiteford Academy	Harry	O'Donnell	08/07/1996	2
Whiteford Academy	James	Moss	19/02/1996	2
Whiteford Academy	Renee	Dickson	04/10/1996	2
Halshott Secondary	Luca	Hunter	09/05/1995	3
Halshott Secondary	Wiesław	Kamiński	11/08/1997	3
Halshott Secondary	Fergus	Jamieson	17/11/1996	3
Halshott Secondary	Tobiasz	Szczepański	18/12/1997	3
Whiteford Academy	Рорру	Kirby	10/07/1996	3
Whiteford Academy	Skye	Hopkins	03/02/1996	3