

**Assessment resource for
Unit standard 2786 Create and use a simple computer flatfile
database to solve a problem
Level 2, Credit 3, Version 5**

This assessment resource for unit standard 2786 includes:

- a student results sheet, which doubles as a cover sheet for the assessment task
- an assessment task, including related resources
- an evaluation form and checklist for candidate use
- an assessment schedule
- an evidence guide

Please note that this is just one way to approach assessment for this unit standard. Although it has been designed for use in a polytechnic setting, it can easily be adapted for other assessment contexts. Assessors who choose to use the task without modification will need to be aware that the evidence guide is publicly available to prospective candidates as well as assessors.

The evaluation form has been included here as part of the assessment task; there are, of course, ways to meet the unit standard's evaluation requirements other than by completing a form (refer to *The planning process* document for further information about evaluation). The checklist is provided as an aid to the candidate.

UNIT No: 2786 – Version 5

LEVEL: 2

UNIT TITLE: Create and Use a Simple Computer Flatfile Database to Solve a Problem

ELEMENT: 1-4

CREDITS: 3

ASSESSMENT: ONE of ONE

ASSESSMENT TYPE: Assignment –Open Book

Suggested Time 6 hours

		Check	Not Yet Competent	Credit
Element 1 Plan a simple database to provide a solution to a problem			<input type="checkbox"/>	<input type="checkbox"/>
1.1	A plan is developed to meet the requirements of a supplied brief.	<input type="checkbox"/>		
1.2	The plan identifies the purpose of the database.	<input type="checkbox"/>		
1.3	The plan includes a basic outline of the database specifications and/or features required to provide a solution.	<input type="checkbox"/>		
Element 2 Produce the database in accordance with the plan			<input type="checkbox"/>	<input type="checkbox"/>
2.1	Database fields are established. Range: fields are formatted in terms of field size, type, and format, as specified by the plan.	<input type="checkbox"/>		
2.2	Records are entered.	<input type="checkbox"/>		
2.3	The database is saved to a file.	<input type="checkbox"/>		
Element 3 Use the database to provide a solution			<input type="checkbox"/>	<input type="checkbox"/>
3.1	The database file is located, opened, and updated: Range: new records added, records deleted, record fields updated.	<input type="checkbox"/>		
3.2	Database records are sorted alphabetically and numerically and printed out in hard copy.	<input type="checkbox"/>		
3.3	Queries are applied to database in order to find requested data occurrences and the results printed out in hard copy.	<input type="checkbox"/>		
3.4	Data integrity practices are demonstrated in terms of comparison with original information sources and audited formulae.	<input type="checkbox"/>		
Element 4 Evaluate the database			<input type="checkbox"/>	<input type="checkbox"/>
4.1	The database is checked for accuracy, readability, legibility, presentation, and data integrity.	<input type="checkbox"/>		
4.2	The database is modified if required and compliance with the brief is confirmed.	<input type="checkbox"/>		

STUDENT ID:	ASSESSMENT DATE:
TUTOR:	ASSESSMENT PREPARED BY:
PROGRAMME:	ASSESSMENT MODERATED BY:

Brief

Robin Hood is President of the Sherwood Forest Archery Club. All the Club members live in Nottingham.

Robin would like the records of the archery club computerised into a database displaying the information in an appropriate format that is legible and easy to read. A hard copy containing the membership data has been supplied in a word processed table.

You are to plan, create and evaluate a database using appropriate field sizes, types and formats to display the club members' information. Because Robin may want to create envelopes from the database in the future, please format the Town/City field to capital letters.

Robin wants to be able to view and print out complete lists of members' details and other selected data from the database as required. He will want to print out the database viewed in different ways (eg arranged by Number or Last Name).

Robin will also want you to use the database to:

- a edit records in the table (add, amend, and delete) and reprint the table
- b query (filter) the database to produce only specified information
 - i members' data only (no scores)
 - ii only male members' names and addresses
 - iii members names and scores only
 - iv details of members with certain surnames only eg Tuck or Hood
- c sort the table/query on a specified field
- d print the table/query.

During the course of this assessment your tutor will need to observe you locating and opening the database.

Part A: Plan your database. (PC 1.1, 1.2, 1.3)

Instructions: This part should take about one A4 page.

Create a plan for making the database to meet Robin's requirements. It should include:

- a list of the steps you are going to take in order to complete the project;
- a description of:
 - i the table (including field names, sizes, types and formats) and
 - ii queries that you will need to createin order to provide solutions to the requirements listed in the brief;
- a statement of the purpose of the database.

Part B: Create your database. (PC 2.1, 2.2, 2.3, 3.1, 3.2 - part)

Instructions: READ all the instructions below before you start!

- Create your database to match the description outlined in your plan. Save the file as *Sherwood Archery<your student ID>*.

- Enter the records into the database table from the hard copy provided.
All data within a field must be in the same format.
Save as *Members<your student ID>*.
Printout One
 - Format the City field to be displayed as all capital letters.
 - Edit the data records to remove any inconsistencies or errors in the data (eg wrong spelling).
 - Print on one page a copy of your table sorted alphabetically (A-Z) by Last Name.
 - Delete the records for Fleur Tuck and Robert Much from your database table.
 - Add the additional records:
Roberta Tuck, 14 Church Rd, Nottingham, F, phone 6286549, DOB 14/5/86, scores 37, 43
Jack Baldrick, 24 Tip Road, Nottingham, M, phone 3847511, DOB 15/1/73, scores 38, 47
 - Amend the entry for Marian Hood - her first name should be Marion and her date of birth 4/8/57.
 - Print out a copy of your data table sorted on the Number field in ascending order.
- Check that the data and formats are correct, or have been corrected appropriately, by comparing it with the original document and the instructions above.
Printout Two

Part C: Use the database. (PC 3.2 - part, 3.3, 3.4)

Instructions:

Robin Hood needs some information about club members. Create appropriate queries to provide lists for him. You must save and print out copies of each of these query results.

- Produce a list of the club members sorted numerically by date of birth (oldest first). All fields except the scores are required.
Save as *Member Data<your student ID>*.
Printout Three
- Produce a list of male members' names and addresses only.
Save as *Male Members<your student ID>*.
Printout Four
- Produce a list which has all the members' first names, last names and score 1 and score 2 only, sorted numerically by Score 1 descending.
Save as *Scores<your student ID>*.
Printout Five
- Produce a list of the members with the last names Tuck or Hood, using the names and address fields only.
Save as *Tuck and Hood<your student ID>*.
Printout Six

Part D: Evaluate the database. (PC 4.1, 4.2)

Instructions:

Using the evaluation form supplied evaluate your database against the requirements given in the brief.

Ensure that you have completed all the requirements and documented any changes from your original plan resulting from the evaluation of the database.

Complete the compliance statement signifying that the database meets the requirements of the brief.

Evaluation Form

The Plan

- The plan clearly identifies the solution to the problem and meets the requirements of the brief
- Purpose of the database is identified
- Specifications and/or features required are listed

The Database

Database table is created

- Table includes all fields and data
- Fields are appropriately formatted (size, type, format)
- Records have been added
- Records have been deleted
- Record has been updated
- Data has been sorted alphabetically (Printout One)
- Data has been sorted numerically (Printouts Two and Five)
- Data has been sorted by date (Printout Three)
- All data is included, is in the appropriate format, and is accurate
- Database is presented in a logical, legible and easy to read format

- Database contains four queries
- Criteria are set within the queries
- Query data are printed (Printouts Three, Four, Five and Six)
- All printouts are legible and readable (on one page each)
- Database modifications are described and confirmed below (if appropriate)
- Database complies with the brief

Modifications (if required)

Compliance Statement

Check list:

You must hand in:

- your plan, which includes:
 - i the list of steps you took,
 - ii a description of the database fields you used,
 - iii a description of the queries required, and
 - iv the statement of purpose of the database;
- two printouts of your database table;
- printouts of the four queries you used in order to find the requested data;
- the evaluation form (Part D) describing:
 - i how you evaluated your database,
 - ii what modifications were necessary (how and why you made them), and
 - iii a compliance statement.

Sherwood Forest Archery Club - Membership List

Number	First Name	Last Name	Street	Town/City	Female/Male	Telephone	DOB	Score1	Score2
1.	Robin	Hood	47 Leafy Close	NOTTINGHAM	M	6754312	6/6/55	89	92
2.	Marian	Hood	47 Leafy Close	NOTTINGHAM	F	6754312	14 Aug 57	76	85
3.	John	Little	85 Twiggy Drive	NOTTINGHAM	M	6857643	17/2/53	64	58
4.	Elinore	Little	85 Twiggy Drive	NOTTINGHAM	F	6857643	14/12/52	75	81
5.	Stuart	Little	85 Twiggy Drive	NOTTINGHAM	Male	6857643	23/9/75	92	87
6.	Jenny	Little	85 Twiggy Drive	NOTTINGHAM	F	685 7643	20/6/77	75	88
7.	Sandra	Little	85 Twiggy Drive	NOTTINGHAM	F	6857643	14/5/1986	66	62
8.	Robert	Much	17 Flower Lane	NOTTINGHAM	M	6637897	27/7/84	86	82
9.	William	Scarlett	46 Crimson Close	NOTTINGHAM	M	6247853	3/6/76	43	52
10.	Jemima	Scarlett	46 Crimson Close	NOTTINGHAM	F	62 47853	17/4/78	65	59
11.	Jane	Baldrick	24 Tip Rd	NOTTINGHAM	F	6384751	23/12/72	65	78
12.	Robert	Baldrick	36 Tip Rd	NOTTINGHAM	Mr	6384779	4/11/1970	53	58
13.	Friar	Tuck	14 Church Rd	NOTTINGHAM	M	6286 549	25 July 48	56	64
14.	Nell	Tuck	14 Church Rd	NOTTINGHAM	F	6286549	14/8/49	65	68
15.	Fleur	Tuck	14 Church Rd	NOTTINGHAM	F	6286549	15/10/81	78	73
16.	Moll	Tuck	14 Church Rd	NOTTINGHAM	F	6286549	6/3/83	78	82

Unit 2786 Assessment Schedule

Outcomes of assessor judgements using the following schedule will be recorded on the student results/cover sheet, if the format used in this resource is followed. As the student results sheet indicates, final assessor judgements should be at element level, once evidence indicated collectively by the performance criteria has been considered.

PC	Evidence	Judgement
1.1	A plan has been created.	Plan clearly indicates that the intended solution will meet the requirements of the brief. (see evidence guide).
1.2	The purpose of the database is identified and clearly stated.	Any appropriate wording will be acceptable as long as it indicates the purpose in keeping with the brief. (see evidence guide).
1.3	The database specifications and/or features are provided.	Specifications/features include: a full description of the data table; a list of fields, including the field size, type, formatting and four query designs to be used. (see evidence guide).
2.1	The database file is created.	The database table is created as per the specifications given in the plan.
2.2	All required records are entered.	All 16 required records are added to the database. (see evidence guide).
2.3	The database is saved as instructed.	The database is saved to a file using the supplied filename and path.
3.1	Database is located and opened. Records are updated, edited, added and deleted as required.	Database is located and opened – evidenced by tutor observation. Database is edited and updated. Evidence of editing will be shown by: the correction of the mistakes in the original data – spelling of Nottingham; addition of records - Roberta Tuck, Jack Baldrick; edited record of Marion Hood; deleted records for Fleur Tuck, Robert Much The actual evidence comes from the printouts of the database table. (see evidence guide)
3.2	Lists are printed appropriately and contain all necessary data.	Tables and queries are sorted alphabetically and numerically as instructed and hard copies are produced. (see evidence guide)
3.3	Hard copies of the queries are produced.	Four queries are produced and printed containing the requested data. (Sorting is not being tested here but all data must be correct). (see evidence guide)
3.4	Data integrity practices are demonstrated.	Data integrity practices are demonstrated and the database is produced showing information has been entered accurately with correction of the mistakes in the data table (PC.3.1) and correct formats in the DOB, Male/Female and Telephone fields. The data table is reprinted. (see evidence guide).

4.1	Database is evaluated and an evaluation report completed.	The results have been evaluated to verify compliance with the brief and any modifications have been recorded. All required items must be present: ie on one page, font is readable and legible, appropriate presentation and correct data.
4.2	A compliance statement is included.	A compliance statement is present. It may be worded in any appropriate fashion as long as compliance is clearly indicated.

An evidence guide follows this schedule.

Unit 2786 Assessment Resource – Evidence guide

This evidence guide suggests the types of evidence (handwritten or printed) that assessors should expect from candidates.

The plan

Candidates should produce notes that include:

- a list of steps,
- a description of the table and queries, and
- a statement of the database's purpose.

A list of steps might look something like this:

- Read through the brief.
- Decide what fields are required and list them including the formatting required in each field.
- Create the database table using the fields and formatting decided above after reading the brief.
- Enter the given data from the sheet for the 16 members.
- Printout data table.
- Edit the data as required in the brief (add, remove and up-date records).
- Re-print data table.
- Create, run and save the queries to provide the four lists of members required by Robin Hood.
- Print out results of queries.
- Evaluate the database and complete the evaluation form, noting any modifications made to the original plan.
- Complete the compliance statement.

Description of table and queries:

This may be a handwritten sketch, or a typed table such as the following:

Field Name	Number	First Name	Last Name	Street	Town/City	Male/Female	Telephone	DOB	Score 1	Score 2
Type	Number	Text	Text	Text	Text	Look up	Text	Date	Number	Number
Field Length	Default	25	25	40	30	8	8		7	7
Format					Capitals >	Female/Male/Unknown	In put Mask 000 0000	Short date		

Example of a statement of purpose

The database to be created is to contain the given details of the members of the Sherwood Archery Club of Nottingham and to enable Robin Hood, the President, to print out the required lists of all members' data or selected data only.

Candidates will probably usually print the table or query from Access or other database program they are using. The following printouts have been done as screen dumps.

Printout One

Members Student ID : Table										
No	First Name	Last Name	Street	Town/City	Telephone	Female/Male	DOB	Score 1	Score 2	
▶ 11	Jane	Baldrick	24 Tip Rd	NOTTINGHAM	6384751	Female	23/12/1972	65	78	
12	Robert	Baldrick	36 Tip Rd	NOTTINGHAM	6384779	Male	4/11/1970	53	58	
2	Marian	Hood	47 Leafy Close	NOTTINGHAM	6754312	Female	14/08/1957	76	85	
1	Robin	Hood	47 Leafy Close	NOTTINGHAM	6754312	Male	6/06/1955	89	92	
3	John	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Male	17/02/1953	64	58	
4	Elinore	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	14/12/1952	75	81	
5	Stuart	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Male	23/09/1975	92	87	
6	Jenny	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	20/06/1977	75	88	
7	Sandra	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	14/05/1986	66	62	
8	Robert	Much	17 Flower Lane	NOTTINGHAM	6637897	Male	27/07/1984	86	82	
9	William	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Male	17/04/1978	65	59	
10	Jemima	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Female	17/04/1978	65	59	
13	Friar	Tuck	14 Church Rd	NOTTINGHAM	6286549	Male	25/07/1948	56	64	
14	Nell	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	14/08/1949	65	68	
16	Moll	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	6/03/1983	78	82	
15	Fleur	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	15/10/1981	78	73	
* 0								0	0	

Printout Two

Members Student ID : Table										
No	First Name	Last Name	Street	Town/City	Telephone	Female/Male	DOB	Score 1	Score 2	
▶ 1	Robin	Hood	47 Leafy Close	NOTTINGHAM	6754312	Male	6/06/1955	89	92	
2	Marion	Hood	47 Leafy Close	NOTTINGHAM	6754312	Female	4/08/1957	76	85	
3	John	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Male	17/02/1953	64	58	
4	Elinore	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	14/12/1952	75	81	
5	Stuart	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Male	23/09/1975	92	87	
6	Jenny	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	20/06/1977	75	88	
7	Sandra	Little	85 Twiggy Drive	NOTTINGHAM	6857643	Female	14/05/1986	66	62	
9	William	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Male	17/04/1978	65	59	
10	Jemima	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Female	17/04/1978	65	59	
11	Jane	Baldrick	24 Tip Rd	NOTTINGHAM	6384751	Female	23/12/1972	65	78	
12	Robert	Baldrick	36 Tip Rd	NOTTINGHAM	6384779	Male	4/11/1970	53	58	
13	Friar	Tuck	14 Church Rd	NOTTINGHAM	6286549	Male	25/07/1948	56	64	
14	Nell	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	14/08/1949	65	68	
16	Moll	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	6/03/1983	78	82	
17	Roberta	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	14/05/1986	37	43	
18	Jack	Baldrick	24 Tip Road	NOTTINGHAM	3847511	Male	15/01/1973	38	47	
* 0								0	0	

Printout Three

Member Data Student Id : Select Query								
No	First Name	Last Name	Street	Town/City	Telephone	Female/Male	DOB	
▶	13	Friar	Tuck	14 Church Rd	NOTTINGHAM	6286549	Male	25/07/1948
	14	Nell	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	14/08/1949
	4	Elinore	Little	85 Twigg Drive	NOTTINGHAM	6857643	Female	14/12/1952
	3	John	Little	85 Twigg Drive	NOTTINGHAM	6857643	Male	17/02/1953
	1	Robin	Hood	47 Leafy Close	NOTTINGHAM	6754312	Male	6/06/1955
	2	Marion	Hood	47 Leafy Close	NOTTINGHAM	6754312	Female	4/08/1957
	12	Robert	Baldrick	36 Tip Rd	NOTTINGHAM	6384779	Male	4/11/1970
	11	Jane	Baldrick	24 Tip Rd	NOTTINGHAM	6384751	Female	23/12/1972
	18	Jack	Baldrick	24 Tip Road	NOTTINGHAM	3847511	Male	15/01/1973
	5	Stuart	Little	85 Twigg Drive	NOTTINGHAM	6857643	Male	23/09/1975
	6	Jenny	Little	85 Twigg Drive	NOTTINGHAM	6857643	Female	20/06/1977
	10	Jemima	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Female	17/04/1978
	9	William	Scarlett	46 Crimson Close	NOTTINGHAM	6247853	Male	17/04/1978
	16	Moll	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	6/03/1983
	17	Roberta	Tuck	14 Church Rd	NOTTINGHAM	6286549	Female	14/05/1986
	7	Sandra	Little	85 Twigg Drive	NOTTINGHAM	6857643	Female	14/05/1986
*	0							

Printout Four

Male Members +Student ID : Select Query					
	First Name	Last Name	Street	Town/City	Female/Male
▶	Robin	Hood	47 Leafy Close	NOTTINGHAM	Male
	John	Little	85 Twigg Drive	NOTTINGHAM	Male
	Stuart	Little	85 Twigg Drive	NOTTINGHAM	Male
	Robert	Baldrick	36 Tip Rd	NOTTINGHAM	Male
	Friar	Tuck	14 Church Rd	NOTTINGHAM	Male
	William	Scarlett	46 Crimson Close	NOTTINGHAM	Male
	Jack	Baldrick	24 Tip Road	NOTTINGHAM	Male
*					

Printout Five

Scores +Student ID : Select Query				
	First Name	Last Name	Score 1	Score 2
▶	Stuart	Little	92	87
	Robin	Hood	89	92
	Moll	Tuck	78	82
	Marion	Hood	76	85
	Elinore	Little	75	81
	Jenny	Little	75	88
	Sandra	Little	66	62
	Jane	Baldrick	65	78
	Nell	Tuck	65	68
	William	Scarlett	65	59
	Jemima	Scarlett	65	59
	John	Little	64	58
	Friar	Tuck	56	64
	Robert	Baldrick	53	58
	Jack	Baldrick	38	47
	Roberta	Tuck	37	43
*			0	0

Printout Six

Tuck and Hood +Student ID : Select Query				
	First Name	Last Name	Street	Town/City
▶	Robin	Hood	47 Leafy Close	NOTTINGHAM
	Marion	Hood	47 Leafy Close	NOTTINGHAM
	Friar	Tuck	14 Church Rd	NOTTINGHAM
	Nell	Tuck	14 Church Rd	NOTTINGHAM
	Moll	Tuck	14 Church Rd	NOTTINGHAM
	Roberta	Tuck	14 Church Rd	NOTTINGHAM
*				

Evaluation Form

Plan

- The plan clearly identifies the solution to the problem and meets the requirements of the brief
- Purpose of the database is identified
- Specifications and/or features required are listed

Database

Database table is created

- Table includes all fields and data
- Fields are appropriately formatted (size, type, format)
- Records have been added
- Records have been deleted
- Record has been updated
- Data has been sorted alphabetically (Printout One)
- Data has been sorted numerically (Printout Two, Printout Five)
- Data has been sorted by date (Printout Three)
- All data is included, is in the appropriate format, and is accurate
- Database is presented in a logical, legible and easy to read format
- Database contains four queries
- Criteria are set within the query
- Query data are printed (Printouts Three, Four, Five and Six)
- All printouts are legible and readable (on one page each)
- Database modifications are described and confirmed below (if appropriate)
- Database complies with the brief

Modifications (if required)

Any changes made to the layout or the design of the table and/or queries must be documented here with reasons given for these changes. _____

Compliance Statement:

A statement must be included that indicates that the database complies with and meets all the requirements of the brief. _____
