

L3 Lead Examiner Report 1901

January 2019

**L3 Qualification in Information
Technology**

**Unit 2: Creating systems to
manage information**

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What is a grade boundary?

A grade boundary is where we set the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade, at Distinction, Merit and Pass.

Setting grade boundaries

When we set grade boundaries, we look at the performance of every learner who took the external assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark is for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

Variations in external assessments

Each external assessment we set asks different questions and may assess different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each assessment, because then it would not take accessibility into account.

Grade boundaries for this, and all other papers, are on the website via this link:

<http://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html>

Unit 2: Creating Systems to Manage Information

Grade	Unclassified	Level 3			
		N	P	M	D
Boundary Mark	0	9	19	29	40

Introduction

Please note there is a paper-based solution and two marked live scripts available for use with this examiner's report.

It is advised that teachers use this report alongside the identified resources for candidates to gain the full benefit of the outcomes of this examination and to help prepare them for their own assessment. The resources are available [here](#) and will be referred to throughout this report.

This unit is a mandatory synoptic unit, which requires candidates to complete set tasks to design, create, test and evaluate a relational database system that manages information. The scenario in this examination was based around a skating competition.

Many candidates coped well with the content, requirements and degree of difficulty, fewer were not ready for assessment ie not fully prepared or without the necessary skills to access the tasks or prepare the evidence.

In terms of administration it was pleasing to see that most candidates submitted only the evidence requested and ensured they followed the naming conventions specified in the paper. However, at times, candidates submitted their database. The database cannot be marked. Most centres printed the required documents and sent them with the USB or disc. However, if possible, USBs are preferable as not all computers have disc drives which could prove difficult for some examiners.

Centres **must** use the examination templates provided with each examination paper.

It is important to define what is deemed acceptable with regards to help and assistance before, during and after the examination sessions. The teacher should prepare the candidates for the examination by developing the technical skills necessary to create a database at this level and to produce the required paperwork. At no point should the teacher be examining the data file or the templates. These, along with the paper itself, should be treated as confidential examination material. All should be

viewed and used **only by the candidates** and **only during the controlled assessment sessions**.

It is also worthwhile noting that teachers can revise between controlled assessment sessions. However, revision sessions should not be focused on the live assessment, using the live paper, live templates or live data file. For example, teachers could revise how to create parameter queries, linking queries to input on a form or any other topic students wish to revise but the resources and examples used must be generic.

There were fewer number of solutions that appeared to be centre led as opposed to the candidates' individual work. Centre led solutions will never be appropriate. The work should clearly be the candidates' own.

Please note that the data file in any examination contains data that the candidates must accept as it is presented. It is up to the candidates to decide how to cope with any anomalies that may be present. This is true of any 'live' situation in the real world where they would have to make their own decisions about how to proceed.

Centres **should not** be examining the data file at all, either before or during the assessment period. Candidates should accept the data file as is. If they think the data is not as realistic as it should be (and it will never be fully 'real world' as it is limited to what can realistically be achieved in 10 hours) or they think there are anomalies, then the evaluation is a very good place to show their understanding of these. Indeed, it is a very good place to gain marks for technical knowledge and understanding.

Candidates are not required to create any new attributes, they should use **all, and only**, the attributes present in the datafile they have been given. Please note using all and only the attributes given does not mean that candidates cannot rename attributes. This is perfectly acceptable.

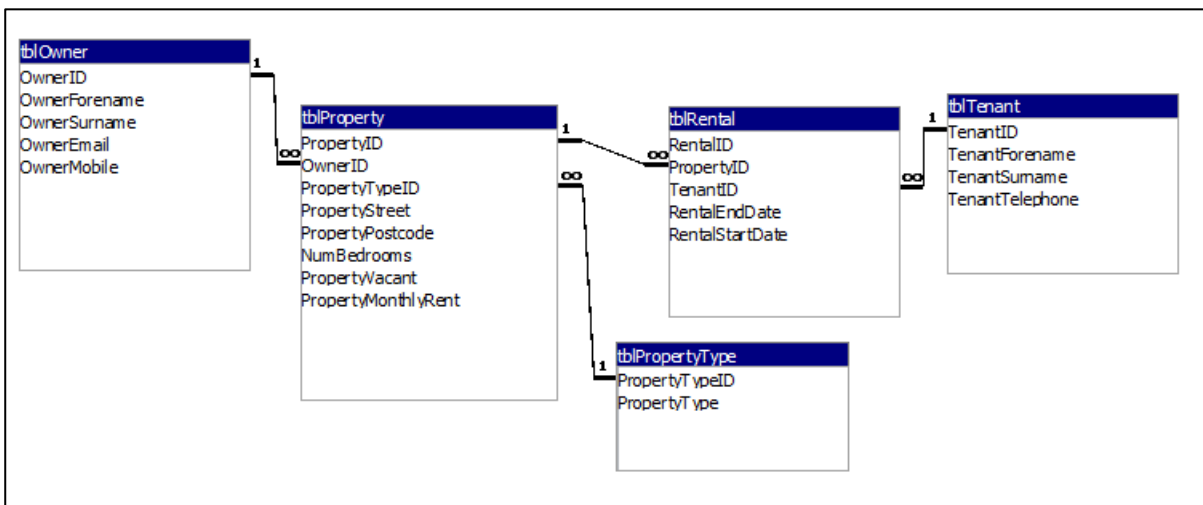
Task 1 – Database relationship screenprint

This task is designed to test the candidates’ knowledge and skills in terms of database modelling via creating a database skeleton structure that reflects third normal form. They should use **all, and only**, the attributes given in the data file.

Teachers are advised to download Script A, Script B and the example solution. In terms of this task these pages are of relevance:

Script A	3
Script B	3
Example Solution	3

The evidence expected here is **database relationship screenprint** taken from their database. Some candidates choose to use the ‘relationship report’ tool producing a screenprint like this:



It is perfectly acceptable providing the relationship types can be seen (enforced referential integrity). Examiner scan determine primary and foreign keys form the 1 to M symbols.

No annotations are required, and candidates should be discouraged from including them.

The screenprint should include:

- each table in their solution
- fields in each table
- assigned primary keys
- foreign keys (where appropriate)
- relationships between tables
- the enforcement of referential integrity

It was good to see that all candidates attempted this question with many candidates achieving full marks.

Please note that it was perfectly acceptable to include the PropertyMonthlyRent in the rental table as opposed to the property table (see the evaluation for further comments in terms of this). However, it should not have appeared in both.

Where marks were not achieved it tended to be because:

- fields were truncated in tables. Each attribute that cannot be seen is taken as an instance of data redundancy.
- candidates had tried to squeeze the solution into four tables which clearly violated third normal form based on the data given
- referential integrity was not enforced
- links between the table were not on the correct fields

Task 2 – Table structures and validation

Candidates **must** use the template provided in each examination series for this task. Examiners mark the evidence against the candidates’ own entity relationship screenprint (activity 1) to ensure candidates are not double penalised for any errors occurring in activity 1. Where candidates have not included an activity 1, their structure is marked against our solution. It is designed to test their ability to build the database tables following standard naming conventions including the good use of field names, relevant data types, assignment of primary and foreign keys and a range of suitable validation.

Teachers are advised to download Script A, Script B and the example solution. In terms of this task these pages are of relevance:

Script A	4-10
Script B	4-10
Example Solution	4-8

Traits 1, 2 and 3

Field Name	Data Type
OwnerID	AutoNumber
OwnerForename	Short Text
OwnerSurname	Short Text
OwnerEmail	Short Text
OwnerMobile	Short Text

The evidence expected is one screen print per table. This covers all of the first three traits.

Trait 1 Very few candidates did not use standard naming conventions and consistency of naming fields.

Trait 2 Very few candidates did not manage to ensure the structure matched the structure in their activity 1. It is worthwhile advising candidates that if they do make changes to the structure in this activity then they should update their screenprint in activity 1.

Trait 3 Many candidates did use the correct data types for all of their fields:

- PropertyVacant – Yes/No
- PropertyMonthlyRent – Currency
- RentalStartDate – Date/Time
- RentalEndDate – Date/Time
- primary keys, any suitable data type
- foreign keys match their primary (eg number -> autonumber)
- everything else text

Trait 4

Evidence for this trait should include:

Presence Check

TenantForename	Short Text
General Lookup	
Field Size	50
Format	
Input Mask	
Caption	Forename
Default Value	
Validation Rule	Is Not Null
Validation Text	You must enter the forename

One screenprint, **in design view**, showing the field name, presence check and suitable validation text.

A list of the tables and fields where others have been applied. Suitable validation.

Length Check

Three screenprints, **in design view**, on **text** fields that show the field names and lengths applied.

TenantID	AutoNumber
TenantForename	Short Text
General Lookup	
Field Size	50

Value Lookup

NumBedrooms	Number
General Lookup	
Display Control	Combo Box
Row Source Type	Value List
Row Source	1;2;3;4;5
Bound Column	1
Column Count	1
Column Heads	No
Column Widths	1"
List Rows	16
List Width	1"
Limit To List	Yes

A screenprint, **in design view**, for each value lookup applied showing the field name and values used.

Table Lookup

A screenprint, **in design view**, for each foreign key table lookup applied showing the field name and lookup used.

Field Name	Data Type
OwnerID	Number
PropertyTypeID	Number

Field Properties	
General Lookup	
Display Control	Combo Box
Row Source Type	Table/Query
Row Source	SELECT [tblOwner].[OwnerID], [tblOwner].[OwnerForename], [tblOwner].[PropertyTypeID]
Bound Column	1
Column Count	6
Column Heads	No
Column Widths	1.456cm;2.54cm;2.54cm;2.54cm;3.598cm;3.466cm
List Rows	16
List Width	16.138cm
Limit To List	Yes

Range Check

Field Name	Data Type
NumBedrooms	Number

Field Properties	
General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	Bedrooms
Default Value	
Validation Rule	Is Not Null And Between 1 And 5
Validation Text	Bedrooms must be between 1 and 5

A screenprint, **in design view**, for each range check applied showing the field name, range used and suitable validation text.

Note, if the value lookup had limit to list set to yes then this was also taken as proof of a

suitable range check.

Some candidates could not be credited with proving evidence of suitable validation because:

- primary/foreign keys – the table name and/or field name could not be seen
- all other fields – field names could not be seen.

Evidence in terms of validation was mixed:

Presence checks

Generally, well evidenced though some candidates are still using 'Required' set to 'Yes' as opposed to a validation rule. A validation rule is preferred as validation text can be used to produce a good, customised error message.

Also, some are still showing presence checks on primary keys which is not wholly suitable.

Some do not ensure they include a good error message in the validation text.

Length checks

This was very well evidenced.

Candidates do not need to use a validation rule to set the length. Whilst this would indeed allow for a better error message, the length of the exam is considered and how much extra testing this could lead to.

Value lookups

There was a mixed bag of evidence in terms of this.

The scenario pointed to the number of bedrooms being suitable. There were no other suitable value lookups in this paper.

There should be no value lookups on primary keys.

The PropertyVacant should not have been a value lookup and PropertyType was not suitable.

Candidates are not penalised for including unsuitable checks, but they do not add anything to the evidence either. It is worthwhile noting that whilst candidates do not have ensure limit to list is set to yes, it is beneficial for them to do so as this would then become a range check too (as it was a numerical).

Table lookups

The evidence for this is getting better with each exam.

A table lookup for each foreign key is expected with 'limit to list' set to 'Yes' for all of them. At times, however, limiting the list to yes was missed.

Range checks

Again, in this paper the suitable range was on the NumBedroom field. Many candidates achieved either from the value lookup with 'limit to list' set to 'Yes' or a specific range via the validation rule with a good error message given in the validation text.

Format checks

The only format checks that are of interest in terms of marking are those that are specified on relevant text fields.

Discourage candidates from showing format checks for any other type of field as they are ignored.

Format checks should only be included where the data warrants it. In this exam:

- OwnerEmail
- OwnerMobile
- PropertyPostcode
- TenantTelephone

Task 3 – Interface and Functionality

This task is designed to test the candidates’ ability to build the forms, queries and report required to meet the specification requirements. It should be noted that candidates only include annotations where they think it is **absolutely necessary** in order to explain the method used. Candidates can certainly achieve full marks in this task without any annotations at all.

It should be noted that where it says “*ensure you have included enough detail to fully show how works*” it is not a prompt for the candidate to write about what they have done or to show the forms etc working (that is carried out in the testing activity). It is a prompt to make sure they check they have included enough detail in the evidence they have already provided above that statement eg form view, design view, method of generating keys, sources of combo boxes, queries used, code/macros used etc. The question to ask themselves is “*would the examiner know exactly what my forms, queries and report look like, what criteria has been used and exactly how they work?*”

Candidates **must** use the template provided in each examination.

Teachers are advised to download Script A, Script B and the example solution. In terms of this task these pages are of relevance:

Script A	11-27
Script B	11-25
Example Solution	9-27

It is worthwhile considering the focus of the traits in terms of assessment.

Trait 1 This focuses on whether the candidate has included the range of objects required and that what appears on them is what is expected.

Trait 2 This focuses on **criteria** and **calculations**. This applied to the specified queries and the report in the exam paper only.

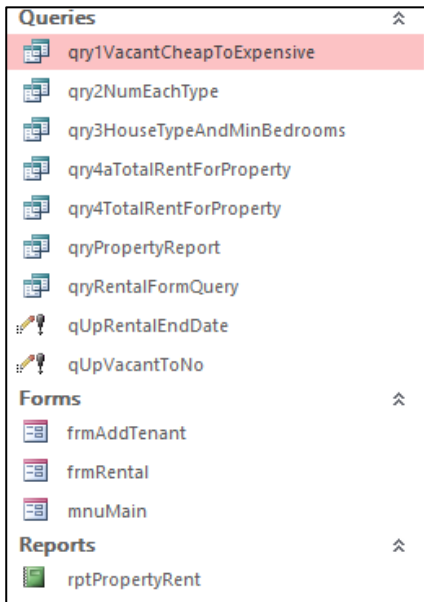
Trait 3 This focuses on the **interface only** and has **nothing to do with automation**.

- Forms - how they look, what user aids have been provided, good labels, disabled fields, asterisks etc.
- Queries - naming of generated fields.
- Report – layout, labels, grouping etc

Trait 4 This focuses on **automation** and **validation**.

Trait 5 This considers all of the other traits and, in particular, traits 2 to 4.

Object Names

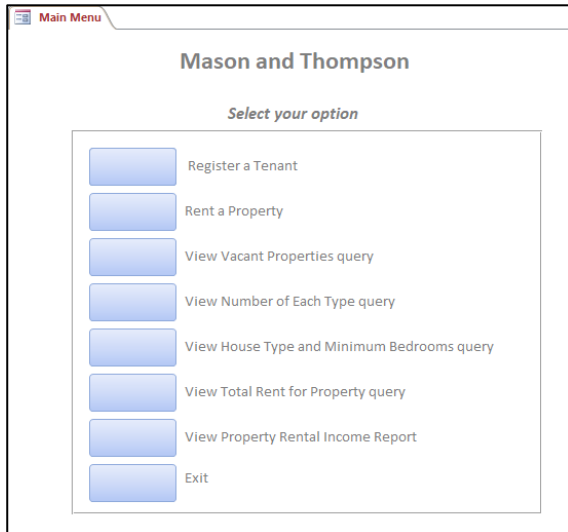


The evidence expected is a screenshot of the object window clearly showing the names of each object. This evidence was considered in traits 1, 3 and 5. Most candidates included this.

However, weaknesses were found:

- some candidates did not name objects appropriately meaning weakness in trait 3 in terms of maintaining the database
- some candidates truncated the screenshot meaning the full names of objects could not be seen
- objects appeared in the object window, but their implementation was missing or the implementation did not reflect the intended purpose of the object

Menu



The evidence expected was a screenshot of the menu in form view, design view and screenprints of any macros or code used to automate the buttons.

This evidence was considered in traits 1, 3, 4 and 5.

The menu should have provided access to all the specified forms, queries and the report.

The evidence for this was very good, overall.

However, there were some candidates who:

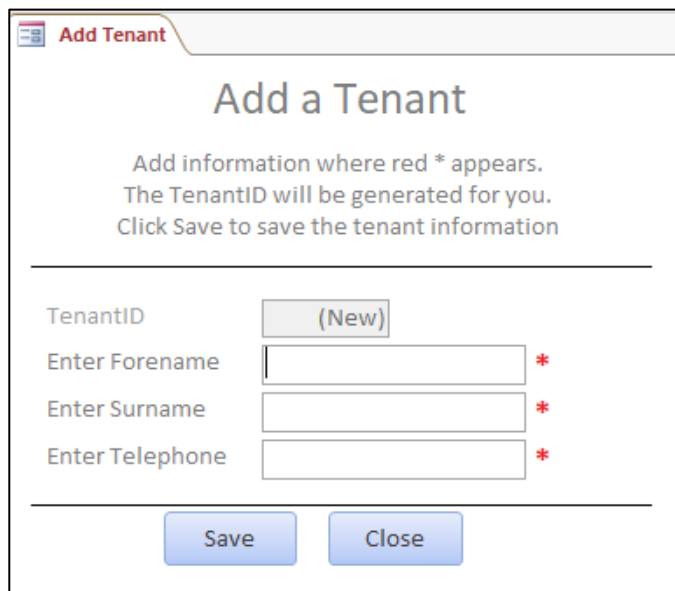
- did not provide a menu
- did not attempt to customise the form eg ensure the lay out was consistent

- did not provide evidence of their automation. Candidates can provide screenprints of code, written by themselves or generated from macros, or macros themselves. If the examiner cannot fully determine what happens when the buttons are pressed, then they cannot determine how well it automates processes.

Tenant Registration

The evidence expected here was one form that would allow a tenant to be added to the system in the relevant table.

Candidates were to include the form in design view and form view along with details of any queries, code/macros used.



Trait 3

For trait 3 it was expected that the candidates would:

- include a suitable title
- include suitable instructions for use
- prevent the user from accessing the TenantID
- provide useful labels for fields
- use suitable field widths
- ensure the user would know which fields were required
- ensure there was a button that would allow the user to start the save process
- use a sensible layout/house style

There was some excellent evidence for trait 3. However, it does not appear to get as much consideration as it should. A candidate achieving band 4 for this trait and band 1 for trait 4 (automation) can still achieve a very good mark for this activity overall. It gives the candidates who find automation difficult a great opportunity to demonstrate their skills in other areas and getting good credit for it. Even some of the candidates who had gone to the trouble of customising the form still left the labels as their defaults. TenantForename etc are not suitable labels either on forms or the report.

Trait 4

For trait 4 it was expected that the candidates would:

1. ensure the form was ready for data entry as it opened
2. generate the new TenantID and assign this to the TenantID field
3. provide a method of saving the record
 - a. cancel the save process if there were errors (with suitable error messages)
 - b. save/append the new tenant into the correct table if there were no errors (with a suitable save message)
 - c. clear the form again ready for the next data entry.

It was pleasing to see the many different creative methods candidates used to meet the automation requirements.

Candidates used a mixture of bound and unbound forms.

1. Ensure the form was ready for data entry as it opened

- Unbound forms did not require anything special to do this
- Bound forms tended to include evidence of the form's 'Data Entry' property being set to yes or by using a macro/vba code to go to a new record.
- Any method was acceptable providing the examiner could determine it would work.

2. Generate the new TenantID and assign this to the TenantID field

- Bound forms included the use of AutoNumber as the method of generating the new key.
- This could be seen by either 'New' in form view, or the candidate specifically showing the data type.
- Others chose to generate the highest existing ID and add one to it,

ensuring it was allocated to the key field (eg query to find highest and add 1, DMAX, MAX etc).

Candidates used the latter method on most of the unbound forms seen.

3. Provide a method of saving the record

- a. cancel the save process if there were errors (with suitable error messages)
 - b. save/append the new tenant into the correct table if there were no errors (with a suitable save message)
 - c. clear the form again ready for the next data entry.
- Bound forms tended to use 'saving' the record method, unbound tended to use the 'append' method. The evidence used had to be appropriate for the type of form used.
 - For the actual save process itself, many candidates chose to evidence it via screenprints of the macro actions, others chose vba code written by themselves and others macro actions converted to vba code.

Where candidates had attempted automation, the main weaknesses were that the candidate did not fully evidence their method(s). For example, examiners cannot guess that the method of generating the key works unless they are shown the full process, the examiners cannot guess the save works without seeing the full process. Candidates should ask themselves "*can the examiner see exactly how my form works from start to finish?*".

Rental

The evidence expected here was one form that would allow a vacant property to be rented.

Candidates were to include the form in design view and form view along with details of any queries, code/macros used.

New Rentals

You must select the tenant.
You must select the property you wish to let.
Enter the start date of the rental (which cannot be in the past).
Click save.

Select the Tenant

Rental ID

Tenant

Telephone

Start Date

Select the vacant property *

PropertyID	Type	Street	Postcode	Bedrooms	Monthly Rent
1	Detached Bungalow	159 Pleasant Pioneer Pike	BV2 2CK	1	£732.34
100	Detached House	340 Buchan Drive	BV3 3BN	2	£559.00
2	Terraced House	119 Devon Way	BV8 3ZE	4	£299.00
3	Detached Bungalow	32 Edward Street	BV0 1UH	2	£801.67
37	Detached House	126 Vane Avenue	BV1 8QZ	4	£550.33
44	Detached House	170 Blossom Circle	BV9 3FV	2	£702.00
5	Semi Detached House	114 Albert Avenue	BV0 6DJ	3	£489.67
58	Semi Detached Bungalow	23 Grove Way	BV5 6IR	1	£398.67
7	Semi Detached Bungalow	126 Vane Avenue	BV1 3UN	2	£498.33
73	Detached House	339 Hazel Street	BV9 0WD	5	£641.33
98	Detached Bungalow	64 Southfields	BV1 3ZZ	2	£745.34

Trait 3

For trait 3 it was expected that the candidates would:

- include a suitable title
- include suitable instructions for use
- prevent the user from accessing the RentalID
- provide useful labels for fields
- use suitable field widths
- ensure the user would know which fields were required
- ensure the user could select a tenant
- ensure the user could select a property
- ensure there was a button that would allow the user to start the save process
- use a sensible layout/house style

Trait 4

For trait 4 it was expected that candidates would:

1. ensure the rental form was ready for data entry as it opened
2. generate the new RentalID and assign this to the RentalID field
3. ensure the rental start date could not be in the past
4. ensure only vacant properties could be selected
5. ensure only tenants that exist could be selected
6. provide a method of saving the record
 - a. cancel the save process if there were errors (with suitable error messages)
 - b. save/append the new rental record into the correct table if there were no errors (with a suitable save message)
 - c. update the PropertyVacant field to 'No'
 - d. update the RentalEndDate to the RentalStartDate if the tenant already had an existing rental
 - e. remove the property from the list of vacant properties
 - f. clear the form again ready for next data entry.

It was also pleasing to see the many different creative methods candidates used to meet the automation requirements of this form.

Candidates also used a mixture of bound and unbound forms.

1. Ensure the rental form was ready for data entry as it opened

- Unbound forms did not require anything special to do this.
- Bound forms tended to include evidence of the form's 'Data Entry' property being set to yes or by using a macro/vba code to go to a new record.
- Any method was acceptable providing the examiner could determine it would work.

2. Generate the new RentalID and assign this to the RentalID field

- Bound forms included the use of AutoNumber as the method of generating the new key.
- This could be seen by either 'New' in form view, or the candidate specifically showing the data type.
- Others chose to generate the highest existing ID and add one to it, ensuring it was allocated to the key field (eg query to find highest and add 1, DMAX, MAX etc).

3. Ensure the rental start date could not be in the past

- Some candidates chose to use a validation rule and validation text on the form.
- Some chose to use an IF statement in either VBA code or a macro.

4. Ensure only vacant properties could be selected

- Where bound forms had been used, those who had used table lookup validation in activity 2 had a combo/list box, by default, for this. Many went on to create a query to find the vacant properties and assign this as the source for the combo/list box.
- Many candidates with unbound forms also used this method but created and named the combo/list box themselves.

5. Ensure only tenants that exist could be selected

- Where bound forms had been used, those who had used table lookup validation in activity 2 had a combo/list box, by default, for this.
- Many candidates with unbound forms also used this method but created and named the combo/list box themselves.

6. Provide a method of saving the record

- a. cancel the save process if there were errors (with suitable error messages)
- b. save/append the new rental record into the correct table if there were no errors (with a suitable save message)
- c. update the PropertyVacant field to 'No'
- d. update the RentalEndDate to the RentalStartDate if the tenant already had an existing rental
- e. remove the property from the list of vacant properties
- f. clear the form again ready for next data entry.

- Bound forms tended to use 'saving' the record method, unbound tended to use the 'append' method. The evidence used had to be appropriate for the type of form used.
- For the actual save process itself, many candidates chose to evidence it via screenprints of the macro actions, others chose vba code written by themselves and others macro actions converted to vba code.
- Not many candidates took into account that a property looks like it is available, even if it has been rented, if the PropertyVacant field was still set to Yes. Even fewer thought about the fact that tenants would not be renting two properties at once. It is expected that candidates have studied the data set and take it into account whilst building the database system. Those who had thought about the PropertyVacant field tended to either use an update query to run as part of the save process or to include the PropertyVacant field on the form itself and update it automatically there. Those who had thought about the tenant not being able to rent more than one property at a time tended to use an update query as part of the save process.
- Those candidates who did realise a property that has just been rented should not longer be available to rent tended to 'requery' the combo/list box after the save had taken place or closed and reopened the form.
- Clearing the form tended to be either moving to a new record or closing and reopening the form.

Where candidates had attempted automation, the main weaknesses were that the candidate did not fully evidence their method(s). For example, examiners cannot guess that the method of generating the key works unless they are shown the full process, the examiners cannot guess the save works without seeing the full process. Candidates should ask themselves "*can the examiner see exactly how my form works from start to finish?*".

Queries

The evidence expected here was design view and datasheet view of the specified queries. Many different approaches to the queries were seen with many of the producing the required results. The evidence for these was considered in traits 1, 2, 3 and 5. Most candidates successfully implemented queries 1, 2 and 3 and most successfully implemented some aspects of query 4. It was nice to see that some candidates also managed to build query 4 in its entirety.

Weaknesses in the evidence included:

- not including design view and/or not including datasheet view of the queries
- truncating the criteria
- not assigning names to generated fields
- not including suitable parameter input messages
- not including additional design and datasheet view of queries where more than one had been used to produce the required output

Report

Tenancy Details		
Property ID	9	
Street	241 Little Leaf	
Postcode	BV4 6NJ	
Start Date	End Date	Tenant Name
01/03/2005	23/01/2013	Adam Bateman
03/02/2013	15/09/2016	Craig Wheeler
29/09/2016	06/12/2016	Hywel Evans
14/12/2016	05/10/2018	Martin Davies
12/10/2018		Andrew Taylor
Number of Rentals 5		
Property ID	17	
Street	11 Godber Place	
Postcode	BV9 3MT	
Start Date	End Date	Tenant Name
01/03/2005	10/01/2015	Joe Murphy
17/01/2015	15/04/2016	Recca Booth
25/04/2016	07/01/2018	Lisa Little
21/01/2018	21/04/2018	Karen Moore
02/05/2018	09/07/2018	Olivia Thomas
23/07/2018		Brady Parker
Number of Rentals 6		
Overall Number of Rentals 11		

The evidence expected here was design view of the database report, design and datasheet view of any queries used and the report itself saved as a separate pdf.

- Each PropertyID, Street and Postcode should have only been shown once
- The RentalStartDate and RentalEnd date and tenant name should have been present
- The total number of rentals per property should have been present and the overall number of rentals

It was pleasing to see how many candidates had thought about the layout and house style for the report rather than just relying on a wizard to

produce results. Most candidates attempted the report with varying degrees of success.

Weaknesses in the evidence included:

- not including the design and datasheet view of any queries used
- not ensuring there was a separate pdf of the actual database report
- not filtering to the correct properties
- not using grouping per property
- not using useful labels (leaving them as defaults)

Task 4 – Testing

This examination saw the introduction of a new testing template. This template included the actual tests candidates needed to carry out. This was implemented in order to try and focus candidates on the aspects of the database that would prove they had taken into account the data set, scenario and task requirements.

The task itself has not changed it is still designed to test the candidates' ability to plan and carry out tests to ensure the database is robust and meets requirements.

Traits 1 and 2 focus on planning whilst traits 3 and 4 focus on the results of this testing.

Candidates **must** use the template provided in each examination and should only carry out the tests specified.

Teachers are advised to download Script A, Script B and the example solution. In terms of this task these pages are of relevance:

Script A	28-39
Script B	26-31
Example Solution	28-41

The new template did appear to help focus candidates. Very few added further tests or changed the tests they were asked to carry out.

However, some candidates still do not fully understand the testing process and how to complete these testing tables.

<i>Add the type of test</i>
N
R
R

This column should be where candidates enter 'N', 'R' or 'X' depending on the whether the testing is normal erroneous or extreme.

Whilst some candidates clearly understood which test belonged to which category some do not. In this activity, normal testing is for data that should be accepted without error. Extreme testing is for boundary testing. It is recognised that the time to complete this activity is limited, therefore, extreme testing will be to test 'outside of the boundary' only and it should produce an error message. Erroneous is for all other testing that should produce an error message.

Normal – eg full valid record saves

Extreme – eg tenantID that does not exist (outside of the range of IDs)

Erroneous – eg surname is not present etc

<i>Add suitable test data</i>
Tenant: Michael Abbott StartDate:25/01/2019 PropertyID:4
Tenant: Michael Abbott StartDate:25/01/2019 PropertyID: Nothing selected in list box
Forename: Gill

Many candidates completed this column with the necessary detail, however, some still do not.

The column should list the fields and exactly what data will be used and what will be left null if applicable.

<i>Add the results you would expect to get from a fully working system</i>
frmAddTenant to open at a blank record For TenantID to be disabled Error message to be displayed saying "You must enter the forename".
frmRental to open at a blank record for RentalID, Tenant and Telephone fields to be disabled For vacant properties to display in list box (results of qryRentalFormQuery)

This column was completed quite well, however, some candidates are still being too vague with their expected results.

It should explicitly say what should happen including exact error message where applicable.

<i>Add screenshot(s) of the results of this test carried out on your database. Ensure you show the test data used in the screenshot(s)</i>

This column was also completed quite well in many instances.

However, evidence of saving is one of the areas that could be improved. Evidence for this should include:

- screenshot(s) of the table(s) prior to save so that the last ID can be identified
- screenshot of the form with the data clearly visible and the save message on screen
- screenshot of the form cleared (if applicable)
- screenshot of the new record in the table(s).

<p><i>Only complete this column if the results are not as expected</i></p> <ul style="list-style-type: none"> • <i>Explain the error</i> <i>If you correct the error explain how you have done it including a screenprint</i>

Where candidates had found errors, they did tend to complete this column, with varying degrees of detail. At the barest minimum candidates should ensure they acknowledge that an error has occurred, even if they don't know why or how to correct it.

If they have gone on to correct the error, they should show screenshots and explain how they have corrected it.

Note candidates may choose to include the screenprints in the actual results column or underneath the testing tables if there is no space in this column. They can also increase the size of the page if they wish eg (A3). Examiners view the evidence electronically so can zoom in.

Task 5 – Evaluation

A template was introduced in this examination in order to try and focus candidates on the aspects of their solution that would best prove they had taken the data file, scenario and task requirements into account.

The task itself did not change ie it is designed to test the candidates’ ability to evaluate their database.

Teachers are advised to download Script A, Script B and the example solution. In terms of this task these pages are of relevance:

Script A	40-44
Script B	32-36
Example Solution	42-43

There were very few instances of candidates only saying ‘Yes’ or ‘No’ though some did do this. These did not attract any marks.

The templates appear to have really benefitted some candidates ie giving them the time to evaluate what is important without going off on a tangent. There were some very detailed evaluations seen that were well worth marks in the highest band.

However, many are still treating the evaluations as an opportunity to describe how they built the database. The examiners have already seen how they built the database and the candidates have already been given credit for that.

Requirements
The database will record information about: <ul style="list-style-type: none"> • the owners and their properties • tenants who rent the properties • property rentals

The evaluation of activity one should be an opportunity for candidates to showcase their knowledge and understanding or normalisation, relationships, primary/composite keys, foreign keys etc and how it relates to their solution. Have they realised an owner can have many properties? It is

also an opportunity to highlight 'issues' with the dataset. The dataset is a snapshot designed to be able to be used in a 10-hour exam. It can never truly be 'real world'. They could have thought about

- a property could have more than one owner in the real world
- each property belonging to a particular owner had the same street address
- monthly rent has never gone up
- where a property was vacant or not could be determined without the need for a PropertyVacant field and so on

Requirement
Properties are categorised by their type. For example, a property can be a detached house.
Properties have at least one bedroom and a maximum of five.

This evaluation of activity 2 was focusing on a foreign key and a range check and how well they were able to incorporate validation to make data entry easier. Table lookup would automatically produce a combo/list box, limit to list would not allow any additions. How would this make life easier etc.

Requirement/Experience
An input form to register a new tenant
An input form to rent out a vacant property. The new property rental cannot begin on a day in the past.

This evaluation of activity 3 was focusing on traits 3 and 4. How easy form is to user, data input aids and automation.

How does what they have done make it easy to complete the forms, how good is their error trapping and what does that mean for the user, how well does the save method work. It is also a good opportunity to acknowledge weaknesses in the solution and

how it could have been better in terms of easy of use, error checking and automation etc.

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