INF10002 – Database Analysis & Design

Learning Summary Report & Portfolio

KHALID YASEEN BAIG (102763240)

Self-Assessment Details

The following checklists provide an overview of my self-assessment for this unit.

	Pass (D)	Credit (C)	Distinction (B)	High Distinction (A)
Self-Assessment (please tick)		✓		

Self-assessment Statement

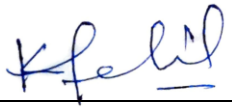
	Included (please tick)			
Week	**Pass Task**	**Credit Task**	**Distinction Task**	**High Distinction Task**
Task 1	✓	✓		
Task 2	✓	✓		
Task 3	✓	✓		
Task 4	✓	✓		
Task 5	✓	✓		
Distinction Task				
High Distinction Task				

Task Checklist

Declaration

I declare that this portfolio is my individual work. I have not copied from any other student's work or from any other source except where due acknowledgment is made explicitly in the text, nor has any part of this submission been written for me by another person.

I understand that I can be penalized (including failing the unit) for submitting any work / part of work that was not done by me which are written in the unit outline.

Signature: 

Assessment Cover Sheet

This Assessment Cover Sheet is only to be attached to hard copy submission of assessments.

ASSESSMENT DETAILS

Unit title	Database Analysis	Tutorial /Lab Group	—	Office use only
Unit code	INF10002	Due date	03/12/2021	
Name of lecturer/tutor	Lee Sue Han			
Assignment title	INF10002 Portfolio			Faculty or school date stamp

STUDENT(S) DETAILS

	Student Name(s)	Student ID Number(s)
(1)	Khalid Yaseen Baig	102763240
(2)		
(3)		
(4)		
(5)		
(6)		

DECLARATION AND STATEMENT OF AUTHORSHIP

1. I/we have not impersonated, or allowed myself/ourselves to be impersonated by any person for the purposes of this assessment.
2. This assessment is my/our original work and no part of it has been copied from any other source except where due acknowledgement is made.
3. No part of this assessment has been written for me/us by any other person except where such collaboration has been authorised by the lecturer/tutor concerned.
4. I/we have not previously submitted this work for this or any other course/unit.
5. I/we give permission for my/our assessment response to be reproduced, communicated, compared and archived for plagiarism detection, benchmarking or educational purposes.

I/we understand that:

6. Plagiarism is the presentation of the work, idea or creation of another person as though it is your own. It is a form of cheating and is a very serious academic offence that may lead to exclusion from the University. Plagiarised material can be drawn from, and presented in, written, graphic and visual form, including electronic data and oral presentations. Plagiarism occurs when the origin of the material used is not appropriately cited.

Student signature/s

I/we declare that I/we have read and understood the declaration and statement of authorship.

(1)	Khalid	(4)	
(2)		(5)	
(3)		(6)	

Further information relating to the penalties for plagiarism, which range from a formal caution to expulsion from the University is contained on the Current Students website at **https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment**

Copies of this form can be downloaded from the Student Forms web page at **https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment/how-to-submit-work.php**

Database Analysis & Design
INF10002

Learning Summary Report

Name: Khalid Yaseen Baig

Student ID: 102763240

Part 1

UNIT SUMMARY

In their day-to-day operations, businesses must store and retrieve vast volumes of data. A database is a organized collection of data that can be accessed and stored electronically. The database management system is software that captures and analyzes data through interacting with end users, applications, and the database itself.

Relational and non-relational databases, are the two most common database types. The structure of relational databases is similar to that of phone books, which hold phone numbers and addresses. Non-relational databases, like file folders, are document-oriented and dispersed and store anything from a person's phone number to their online shopping preferences.

This unit explains how to deal with the data that companies have access to from both internal and external sources, as well as how to store and retrieve data in an usable and efficient manner. As a tool of evaluating, comprehending, and recording data, we are exposed to data modeling and database building strategies. Structured Query Language (SQL), MS-Access, and Power BI are among the key commercial database management tools which are discussed In this Unit along with tools for quick and easy data retrieval and visualization

Major Topics Covered In this unit:

1. MS Access
2. Microsoft power BI
3. SQL
4. ERDs (Entity Relationship Diagram)
5. Normalization & No SQL
6. Transactions & Data Warehousing

SUMMARY OF WEEKLY LECTURES

WEEK 1

In Week 1, We learned about Fundamental DBMS Concepts and tools specifically MS Access.

1. A relational database is a collection of related tables. A relational database management system (RDBMS) is a set of tools that enable developers and users to store and retrieve data from relational databases. It lets users conduct CRUD (create, read, update, and delete) operations on the tables' data.
2. Data is represented in the form of two-dimensional tables.
3. RDBMSs allow multiple users on the network to update data in database tables. There are two major ways of interacting with data within a Database.
   3.1. Graphical user interface (graphical user interface). — For example, Microsoft Access and LibreOffice Base - Mouse clicks, pull-down menus, drag-and-drop, and minimum typing are used for the majority of actions.
   3.2. SQL (structured query language) - Every action is carried out via the SQL language that enforces a very strict syntax.
4. Many RDBMs offer a combination of GUI and SQL interfaces. Access is a complete RDBMS. It is mainly used by individuals or small organizations.
5. A Primary Key is required for every table created. A Primary Key is a field that stores a value that serves as a unique identifier for each record. There are no duplicates allowed.
6. Filters are a convenient way to specify Access which entries to be retrieved once. Queries by comparison are most useful when a search will be repeated.

WEEK 2

In Week 2, We learned about Relationships, Indexes, and Queries.

1. Relationship between the tables is established via Relationship manager in Access when more then one table exists in a database. This creates a Many to One relationship.
2. If relationship is not established between the tables and query is run that uses data from both unrelated tables, then a 'Cartesian product' is created
3. Aggregate function can be performed in Databases which are Count, Sum, Min, Max, and Average.
4. Whenever a primary key is created, Access automatically creates a Primary Key index.
5. A RDBMS may use a search method on the index such as a Binary Search. A Binary Search continues to split the index in half until a match is/is not found. Other then binary search, there are considerably more complicated indexing choices available.
6. Most RDBMS may offer several indexing options / techniques. The option chosen is frequently determined by an understanding of the data values to be stored. Too many indexes can make unacceptable delays. DBMS systems have optimizers. Optimizers are designed to decide the quickest and most efficient way of accessing data

WEEK 3

In Week 3, We learned about queries and Data Import/Export.

1. A parameter is a temporary storage location that is given a name.
2. Make Table icon can be used to copy table but copy tables causes Data redundancy. Append Query is similar to the Make Table option. Instead of making a new table, records selected by a query are appended to an existing table.

3. An Update Query allows us to change the value of a field(s) for many records at one time. A Delete Query is similar to an Update Query .Rows are permanently deleted from a table. A crosstab query performs an aggregation (sum, count…)
4. MS Access can Import and Export Data. Supported file formats are CSV, Delimited File, Excel and XML file formats.
5. There are Two Ways, Data can be imported into MS Access :
   5.1. Make a copy of the original data – The data will be stored in Access Tables.
   5.2. Link to the source data – Source Data is maintained by the original application and Access has a read-only view of the data

WEEK 4

In Week 4, we learned to use POWER BI to visualize Data.

1. Power BI is a collection of desktop and cloud-based online applications for analyzing data.
2. The datasets can be local or cloud-based, and they can be linked to or imported from RBDMSs, spreadsheets, and online data providers, among other sources. Using Power BI Desktop, a single dataset may generate a variety of visuals.
3. Table, Matrix, Report Workspace, Settings, Slicer, Sources, Map, Tree Map, Formula Bar, Visual Filters, Manipulating Data & Functions are just a few examples of data visualization tools.
4. A slicer visualization is a visual filter. The slicer applies to all other visualizations in the report. The report work area may have multiple slicers.
5. We frequently need to alter data via Access queries and Power BI data windows. There are a number of built-in features that can help. In both Access and Power BI, many functions have the same syntax.

WEEK 5

In Week 5, we learned about Surrogate/Natural Keys and Entity Relationship Modelling and diagram.

1. Surrogate keys are usually numeric, and they are often a sequential number provided by the RDBMS. The fundamental benefit of a surrogate key is that it has no commercial significance and it won't have like the natural keys.
2. In RDBMS, a natural key is often a primary key, and they have commercial significance. The user may get information from the key without having to do any lookups. Data Modelling typically uses Natural Keys. Natural Keys are also known as Composite Keys, A composite key is a key made up of multiple values (fields/columns).
3. Entity Relationship Models & Diagrams are one of the approaches to aid in the design of database tables. An entity relationship model is a logical representation of data required by an organization that uses entities to represent people, things, events, and other types of data. Identifies linkages between various entities and is based on the organization's business standards. A graphical illustration of the ERM is an entity relationship diagram. There is no data stored in an ER Model / ER Diagram. An ER Model is a strategy. The ERD and subsequent database design must be tailored to the business rules of the company. Lastly, We must be able to transform the ERD into a Relational Schema in order for modeling to be meaningful.
4. Cardinality constraints define the number of instances of one entity that are linked to instances of another entity.
5. All RDBMSs use the Structured Query Language (SQL). SQL statements go into one of two categories: DDL (Data Definition Language) which maintains database structures and objects. DML (Data Manipulation Language) is a database manipulation language that deals with data within the database.

WEEK 6

In Week 6, we learned foreign key constraints, relationships & participation constraints.

1. The FK constraint compels the RDBMS to validate the Foreign Key column value. Nulls are acceptable as Foreign Key values unlike Primary Keys, where the values cannot be null.
2. ERDs have Participation constraints. Participation limits are drawn on the relationship line between two entities in an ERD. They have no impact on the amount of tables or columns in your database. Cardinality limitations are critical to the success of an ERD. They define how many tables will be created in your database.
3. A query frequently requires the retrieval of data from two tables. Foreign Key / Primary Key relationships are commonly used to link tables.
4. Complex Queries use The 'AND' or 'OR' operator, or a combination of the 'AND' and 'OR' operators. When both AND and OR operators are present in a WHERE clause, the AND operators have priority and must be evaluated first. All operators included in parenthesis () are evaluated first.
5. The Upper () function takes value and returns a value where all characters are in upper case. The Lower () function takes a value and returns a value where all characters are in lower case, Numbers & punctuation not affected by these functions.
6. We may use the like operator to get partial matches for text values. The IN operator lets us define a list of values that could match database values. The IS NULL operator lets you to look for rows with a value that is NULL. Duplicate rows are removed from a result set by using the term DISTINCT (or UNIQUE).

WEEK 7

In Week 7, we learned composite keys, weak entities, aggregate functions, group by and having SQL statements.

1. A person, location, object, event, or notion can all be considered entities. Strong and Weak Entities are the two types of entities that can be found. A strong entity may be recognized by its own attributes, whereas a weak entity borrows part or all of its identity from another entity.
2. When composite PK and FKs are used in a SQL query, the ON clause requires that all columns of the PK and FK be specified.
3. SQL Aggregate Functions include Count, Sum, Min, and Max. Simultaneously , each function is applied to a number of rows. When working with averages or dividing numbers, the number of digits following the decimal place is often large. In this case, the Round() method comes in handy.
4. When you want a non-aggregate expression in the choose clause, you must always use the Group By clause with an aggregate expression.
5. The ORDER BY clause organizes the rows in the result set by a specified column.
6. If a value matches a set of conditions, the Having clause maintains a row in the result set.

WEEK 8

In Week 8, we learned about M:M Relationships, Designing our Own ERDs, SQL Outer Joins and Subqueries.

1. In an ERD, M: M is perfectly valid. An Intersection Entity is a new weak entity created when a M:M is expanded. An Intersection Entity has no extra and characteristics. It is the outcome of a M:M connection being expanded. Expanded ERDs are used by technical/IT experts to help with database design.
2. The steps in designing an ERD are as follows:
    - Identify all Strong Entities and all Attributes
    - Assign attributes to Strong Entities
    - Identify relationships

- Determine cardinality and participation constraints
- Attach remaining attributes to relationships
- Expand M:M relationships with attributes
- Assign attributes to appropriate entities or relationships
- Determine identifiers
- Test your solution

3. Other SQL functions include Date functions, Outer Joins, and Sub Queries. Constraints, Unions
4. UNION combines the results of two searches into a single result set. All unique rows picked by both separate queries are added to the result set when the INTERSECT operator is used. The MINUS operator picks all unique rows picked by the first query, but not those selected by the second query.
5. A SUBQUERY is a complete SQL statement that is placed WITHIN an existing SQL statement. Subqueries are often used when a result cannot be calculated by a single SQL statement.

WEEK 9

In Week 9, we learned about static and variable data, and dig deeper on ERDs and weak entities.

1. A ERDs may contain a multi-valued attribute (MVA). A MVA is a property with braces around it. When an attribute may have many values for an entity instance, it is called a multi-valued attribute.
2. A view is a means to save and name a complicated SQL Select command. An SQL statement is stored in a view. Data is not stored in a view. Even though a view can choose millions of rows, it takes up very little disk space. A virtual table is a term used to describe a perspective. It appears to be a table. It works similarly to a table. It isn't even a table. It's just a piece of SQL code. The rows in the view's generated result set aren't stored. The SQL code in the view is executed each time it is referenced.
3. Characteristic Entity is a strong Entity with only key (identifier) attributes.
4. A view is similar to a table in that you may choose columns from it, utilize the Where clause, and join other tables and/or views. Adding the clause: to a read-only view is an easy method to do so. With a CREATE VIEW declaration that is Read Only

WEEK 10

In Week 10, we learned about Normalisation, NoSQL and JSON.

1. Normalization is a relational schema generation technique used in databases. ERDs are typically replaced by normalization. Normalization does not require the use of diagrams. Normalization's goal is to attain the 3rd Normal Form 3NF, Normalization can be achieved thru three stages, First normal form(1NF) - Remove Repeating groups. Second normal form(2NF) - Remove Part Key Dependencies. Third normal form(3NF) - Remove Non Key Dependencies.
2. The possible anomalies above can be prevented by "normalizing" the database. Un-normalized tables have potential abnormalities such as Insert, Update, and Delete. There are multiple phases of normalization, each of which removes a possible cause of abnormalities.
3. Every table in a relational database has a schema. Every column has a size and data type assigned to it. The table design must be followed by each row. Foreign keys are used to link tables together. Data duplication is no longer an issue. In a database, one piece of information should be saved only once. We can use SQL to look for and retrieve information.
4. A non-relational database is referred to as a NoSQL database. Different types of NoSQL databases exist. Key value stores, such as Redisl and Azure, are examples. Table storage, Cassandra, and Druid are all column-based stores. NEO4, Allegro Graph, and ArangoDB are graph databases; MongoDB and Azure Document DB are document databases.
5. JSON files are similar to XML documents. A Document DB is not required for JSON documents. The JSON acronym stands for JavaScript Object Notation. Objects that include name/value pairs, arrays, and other objects are passed around using this syntax.
6. Data is stored in numerous Documents in Document DB. There are several Properties in each document. Any property (name/value combination) can be used by any document. An ID attribute is required for

each document. Every property is automatically indexed when each document is added to the database. This implies that retrieval times for any data are extremely fast. Every document has been de-normalized. Queries are easy to write and execute. There are fewer joins. Data is superfluous in documents. Documents may be designed in a variety of ways. You have the option of setting up a M: 1 connection between documents. Attempting to store an unlimited number of children in a single document is impracticable. Documents may be designed in a variety of ways. You have the option of setting up a M: 1 connection between documents. Document databases are often duplicated. This enables them to handle a large number of requests and searches. Changes to a document are propagated to numerous replicas of the database using processes in place. Eventual consistency exists in the Document Db. Changes are made to a variety of documents. Multiple replicated databases are used to disseminate changes.

WEEK 11

In Week 11, we learned about Transaction and Data Warehousing.

1. DBMSs have a mechanism for guaranteeing that all tables are properly updated. A database transaction is used to do this. A database transaction usually consists of several SQL statements. A "logical unit of work" is defined as a transaction. It's a set of database procedures that work together to accomplish a single goal. A successful transaction ensures that all of the transaction's actions are performed, This data is committed, All of the transaction's modifications are permanent. An unsuccessful transaction ensures that, None of the transaction's activities are completed, This data is rolled back (not committed), All of the transaction's modifications are canceled. Every transaction is either committed or rolled back by the database management system.
2. All database transactions must adhere to the ACID properties i.e. Atomicity, Consistency, Isolation and Durability.
3. A Data Warehouse is normally a distinct database from the TPS, usually on a different server, a copy of data from the TPS systems is sent to to the DW, data is routinely transmitted from the TPS to the DW, continuous, hourly, or every 24 hours, Not all data from TPS is sent to DW. A DW is not a backup or mirror database, Only relevant data is transmitted to TPS. The data is frequently modified, cleansed, and aggregated when it is sent.
4. An enterprise system is a large, customized software solution that seeks to include all of a company's software applications. The premise is that a system built by a single developer will not have ETL problems. All of the information is accurate and consistent. Data is kept in 'cubes.' The majority of the data in a TPS is not sent to the DW. Data stored in a DW dimension table is not normalized／usually 2nd Normal Form – has non-key dependencies／It contains redundant data.
5. A fact table is a table that contains information about a subject. Large data warehouses are possible. There is a need for large distributed storage systems. A specific area of competence is storing and retrieving tables with vast volumes of data. Data and relationships within the data must be understood. Experts with domain knowledge are just as critical as database experts.

MY REFLECTIONS

Aspects that you found challenging/inspiring/interesting or different to your expectations and why?

As I had just graduated from high school at the start of 2020 and had no prior experience with distance learning, the remote education system was undoubtedly one of the factors I found hard in my initial weeks. After the first several weeks, I settled in, learned the layout of the unit, and things became easier. In comparison to other units, the unit was really well laid out, and the criteria were quite clear and precise, which was a huge help. Another aspect that I found problematic was the 5-hour time difference from Malaysia, which made it difficult to attend online lectures and tutorials, but the fact that lectures and tutorials were recorded was a huge relief.

Another challenging aspect of the UNIT for me was fully grasping ERDs, and I made several errors in my Lab Tasks as a result. However, with some practice, they were slightly easier to grasp.

The amount of material covered and thought in this Unit in just 12 weeks was inspiring, as I never expected I would be able to cover so many topics in such a short period of time. Among the major topics covered in this Unit were MS Access, Power BI, MySQL, ERDs, Normalization, and NOSQL.

The aspect that I found most exciting was studying applications such as Power BI and MS Access. I had no prior knowledge with either, and I found both to be quite exciting to study and explore. It was quite enjoyable and informative to learn how to use Power BI and easily visualize data.

Include the approach that you used to solve problems and how what you have learnt in the unit helped. (including discussing ideas/techniques/principles from this unit can be used in further learning inside and outside university)

The Approach I used to solve problems was basically watching weekly Lectures while marking important points in a notebook prior to attempting Lab Tasks and then google things which I get stuck at, I usually managed to finish the Tasks by repeating this process. Undeniably I got mistakes in my tasks, but I was able to rectify them with the help of my tutor's guidance.

The technique I developed with the help of this unit is to always understand concepts clearly before attempting questions as it will save a lot of time in the long run. I believe this will be invaluable to me in my further learning journey.

Compare and contrast new learning/information within the context of prior learning (as well as any previous assumptions or expectations – with a discussion on how these have either been reinforced or changed)

I had prior experience with MySQL as I had learnt basic MySQL programming in my school, which I believe gave me strong foundation for this unit and helped me grasp the Advanced concepts covered in this Unit. Except that, I had no experience with the things covered in this Unit like MS Access, Power BI, Using Oracle, ERDs etc. There was a slight learning curve in learning how to use the programs, but thanks to the lectures and weekly Lab Tasks, I understood how they work.

At the start, I expected MS Access to be very complicated to use, but with the help of lectures, I was able to easily do the Lab Tasks. Similarly I found Power BI intriguing at first, but after practicing for a while, I was able to easily visualize data without any errors. I Found Oracle simple to use as it was basically MySQL and nothing complicated, and I learnt advanced concepts of MySQL which weren't covered in my High School and definitely took a bit of practice to fully grasp them fully.

I found the concepts of ERDs hard to grasp and it took me a while to understand their workings, I found myself usually confused while doing the tasks like deciding how many entities to keep, deciding the weak and strong entities, to establish relationship between them etc., but it got easier as time went by with practice.

Present areas that you have personally explored (or will explore) beyond the expectations of the unit, as well as indication of the areas where you plan to learn further on your own and why?

I am planning to further explore Power BI and have a expertise in it as am sure it will be a handy skill in my personal as well as professional life. I would also like to further explore Database concepts like ERDs, NO SQL etc as they were pretty intriguing and I believe will be very interesting to learn and help me in further understanding concepts of RDBMS used by practically all the large or small enterprises.

Highlight ideas/techniques/principles that can be generalized and used in other areas or for further learning.

Practicing over and over strengthens our concept and helps us in understanding the Topics even better which might have been troublesome earlier. I believe this can be generalized and used everywhere that Practically learning concepts as we did in this unit is far more beneficial and helps us to grasp the concepts even faster rather then theoretically learning with minimal practicing. I would sim to implement this in my further learning by emphasizing on practically learning concepts instead of theoretically learning them.

Name: Khalid Yaseen Baig Student ID: 102763240

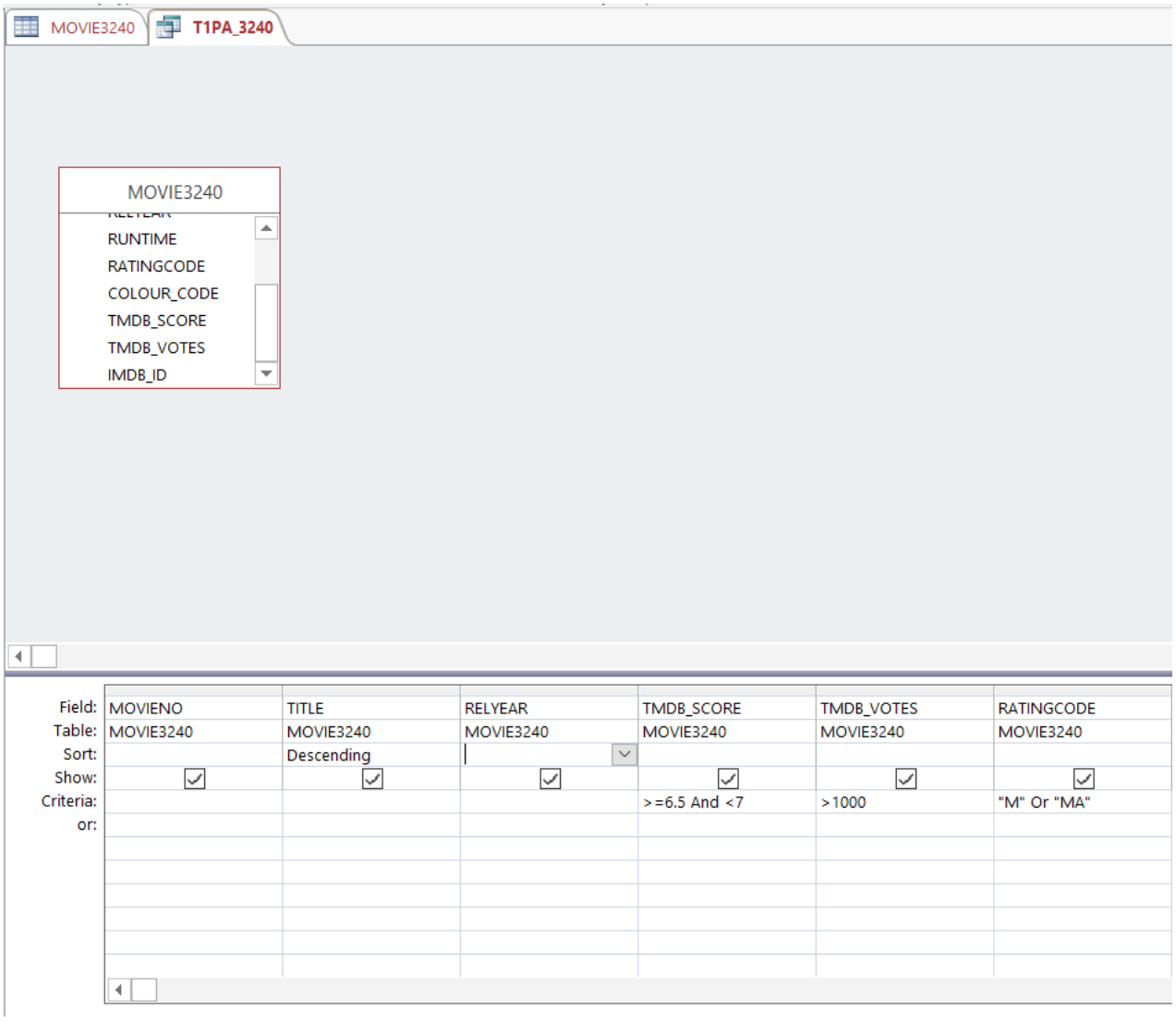
Database Analysis & Design
INF10002

Task 1 – Pass Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Pass 1a

Paste text describing advantages here.

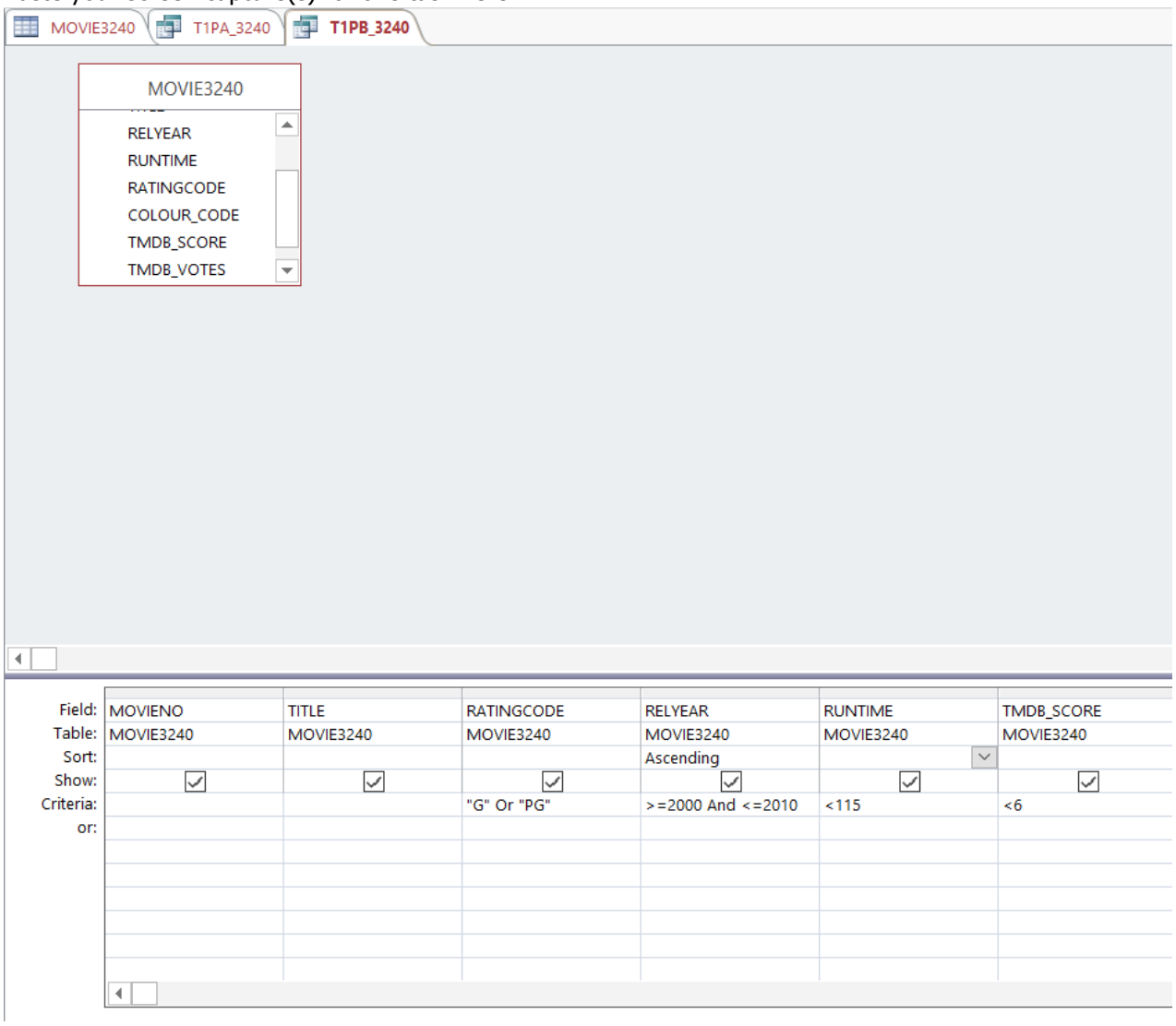


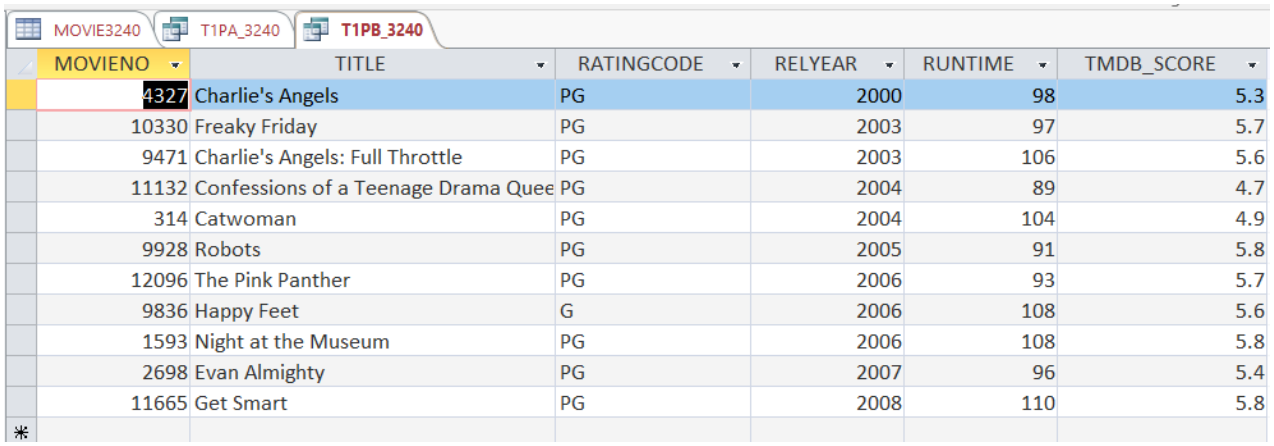
MOVIE3240 | T1PA_3240

MOVIENO	TITLE	RELYEAR	TMDB_SCORE	TMDB_VOTES	RATINGCODE
36657	X-Men	2000	6.5	1693	M
72190	World War Z	2013	6.8	1498	M
1858	Transformers	2007	6.6	1423	M
597	Titanic	1997	6.8	2414	M
604	The Matrix Reloaded	2003	6.5	1317	MA
131634	The Hunger Games: Mockingjay - Part 2	2015	6.6	1914	M
131631	The Hunger Games: Mockingjay - Part 1	2014	6.7	2019	M
49051	The Hobbit: An Unexpected Journey	2012	6.6	4257	M
18785	The Hangover	2009	6.8	2173	MA
1895	Star Wars: Episode III - Revenge of the	2005	6.7	1127	M
37724	Skyfall	2012	6.5	3941	M
82693	Silver Linings Playbook	2012	6.7	1603	MA
58574	Sherlock Holmes: A Game of Shadows	2011	6.7	1361	M
10528	Sherlock Holmes	2009	6.7	2315	M
22	Pirates of the Caribbean: The Curse of	2003	6.9	2114	M
161	Ocean's Eleven	2001	6.8	1606	M
607	Men in Black	1997	6.5	1425	M
49521	Man of Steel	2013	6.6	2637	M
24	Kill Bill: Vol. 1	2003	6.9	1021	MA
68721	Iron Man 3	2013	6.8	4681	M
10138	Iron Man 2	2010	6.5	3033	M
675	Harry Potter and the Order of the Phoe	2007	6.7	1613	M
767	Harry Potter and the Half-Blood Prince	2009	6.8	1499	M
674	Harry Potter and the Goblet of Fire	2005	6.7	1644	M
12444	Harry Potter and the Deathly Hallows:	2010	6.9	1675	M
562	Die Hard	1988	6.9	1692	M
271110	Captain America: Civil War	2016	6.9	2301	M
19995	Avatar	2009	6.9	5601	M
68734	Argo	2012	6.7	1473	M
*					

Pass 1b

Paste your screen capture(s) for this task here.

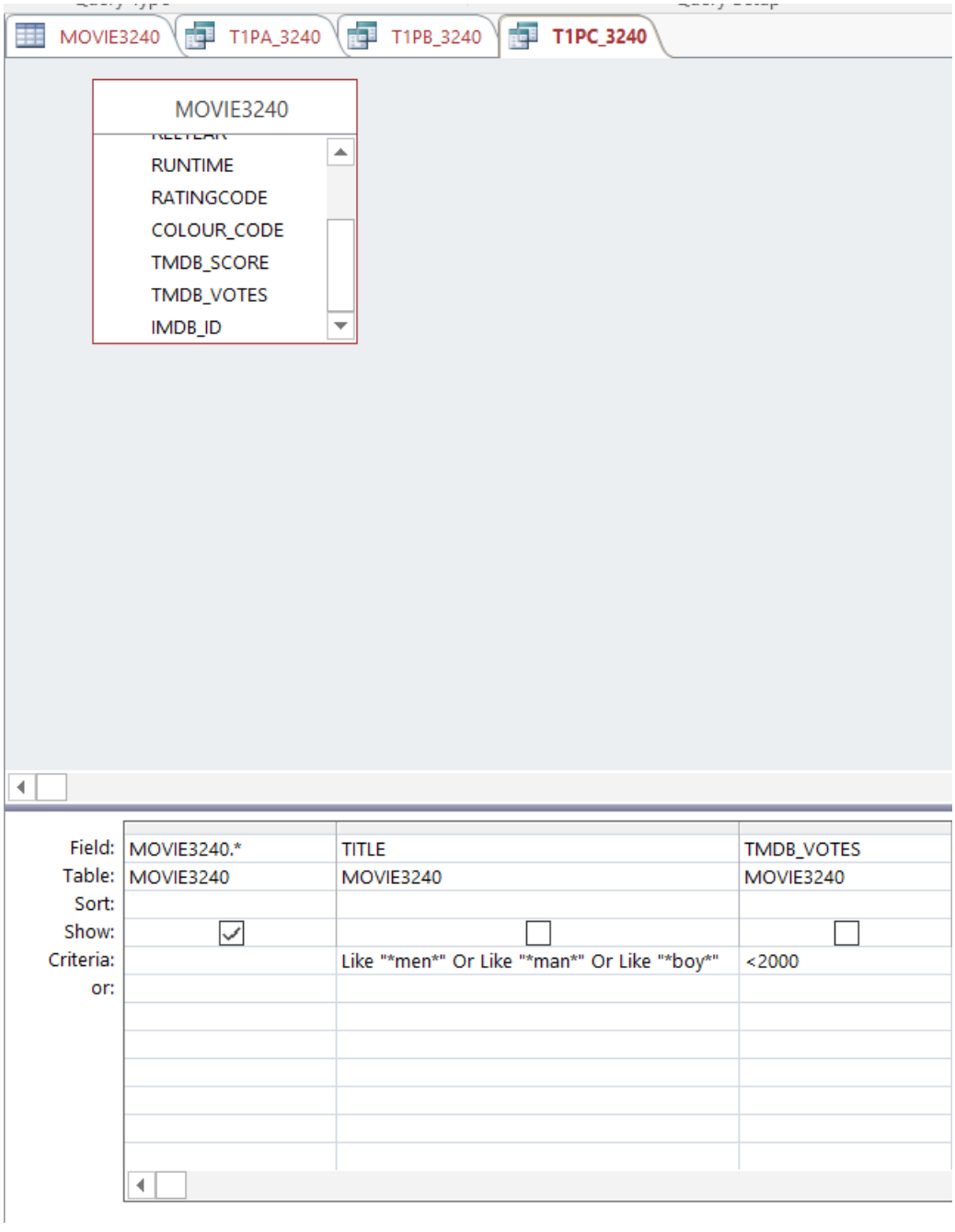




MOVIENO	TITLE	RATINGCODE	RELYEAR	RUNTIME	TMDB_SCORE
4327	Charlie's Angels	PG	2000	98	5.3
10330	Freaky Friday	PG	2003	97	5.7
9471	Charlie's Angels: Full Throttle	PG	2003	106	5.6
11132	Confessions of a Teenage Drama Quee	PG	2004	89	4.7
314	Catwoman	PG	2004	104	4.9
9928	Robots	PG	2005	91	5.8
12096	The Pink Panther	PG	2006	93	5.7
9836	Happy Feet	G	2006	108	5.6
1593	Night at the Museum	PG	2006	108	5.8
2698	Evan Almighty	PG	2007	96	5.4
11665	Get Smart	PG	2008	110	5.8

Pass 1c

Paste your screen capture(s) for this task here.

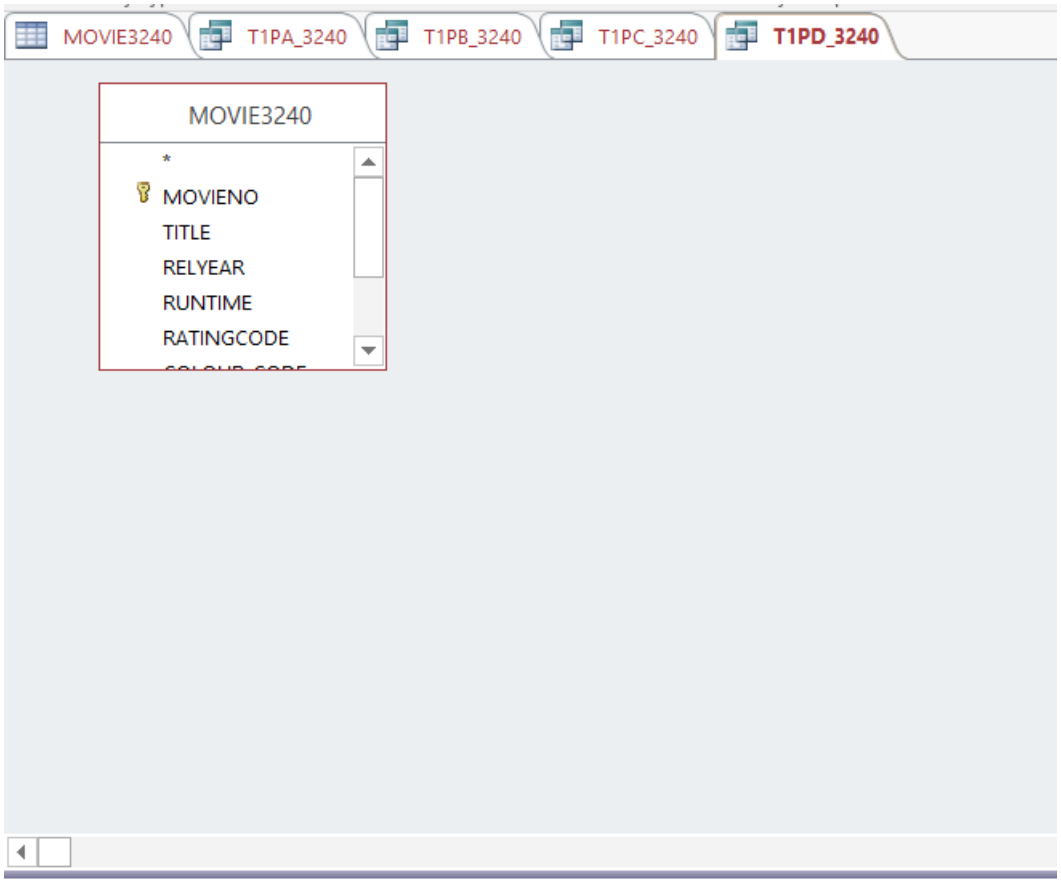


MOVIE3240 | T1PA_3240 | T1PB_3240 | **T1PC_3240**

MOVIENO	TITLE	RELYEAR	RUNTIME	RATINGCODE	COLOUR_CODE	TMDB_SCORE	TMDB_VOTES	IMDB_ID
77	Memento	2000	113	MA	C	7.4	788	tt0209144
114	Pretty Woman	1990	119	MA	C	6.4	303	tt0100405
245	About a Boy	2002	101	M	C	6.3	89	tt0276751
268	Batman	1989	126	M	C	6.5	488	tt0096895
314	Catwoman	2004	104	PG	C	4.9	107	tt0327554
414	Batman Forever	1995	121	M	C	5.3	341	tt0112462
415	Batman & Robin	1997	125	M	C	4.8	272	tt0118688
557	Spider-Man	2002	121	M	C	6.2	1500	tt0145487
558	Spider-Man 2	2004	127	M	C	6.1	1315	tt0316654
559	Spider-Man 3	2007	139	M	C	5.6	898	tt0413300
607	Men in Black	1997	98	M	C	6.5	1425	tt0119654
804	Roman Holiday	1953	118	PG	B	7.8	56	tt0046250
816	Austin Powers: International Man of M	1997	94	M	C	6.3	201	tt0118655
881	A Few Good Men	1992	138	M	C	6.7	190	tt0104257
3981	What Women Want	2000	127	M	C	5.8	188	tt0207201
8699	Anchorman: The Legend of Ron Burgur	2004	94	M	C	6.6	312	tt0357413
9824	Mystery Men	1999	121	PG	C	5.9	28	tt0132347
11520	Grumpy Old Men	1993	103	PG	C	6.5	26	tt0107050
36657	X-Men	2000	104	M	C	6.5	1693	tt0120903
58595	Snow White and the Huntsman	2012	127	M	C	5.4	1076	tt1735898
102382	The Amazing Spider-Man 2	2014	142	M	C	7.1	464	tt1872181
127585	X-Men: Days of Future Past	2014	131	M	C	7.9	592	tt1877832
152760	The Monuments Men	2014	118	M	C	6.2	199	tt2177771
203801	The Man from U.N.C.L.E.	2015	116	M	C	7	1267	tt1638355
*								

Pass 1d

Paste your screen capture(s) for this task here.



Field:	MOVIENO	TITLE	RELYEAR	RUNTIME
Table:	MOVIE3240	MOVIE3240	MOVIE3240	MOVIE3240
Sort:	Ascending			
Show:	☑	☑	☑	☑
Criteria:		Like "ha*" Or Like "*es"		
or:				

MOVIE3240 | T1PA_3240 | T1PB_3240 | T1PC_3240 | **T1PD_3240**

MOVIENO	TITLE	RELYEAR	RUNTIME
671	Harry Potter and the Philosopher's Stone	2001	152
672	Harry Potter and the Chamber of Secrets	2002	161
673	Harry Potter and the Prisoner of Azkaban	2004	141
674	Harry Potter and the Goblet of Fire	2005	157
675	Harry Potter and the Order of the Phoenix	2007	138
714	Tomorrow Never Dies	1997	119
767	Harry Potter and the Half-Blood Prince	2009	153
869	Planet of the Apes	2001	119
871	Planet of the Apes	1968	112
1621	Trading Places	1983	116
1633	Fried Green Tomatoes	1991	130
1824	50 First Dates	2004	99
7980	The Lovely Bones	2009	135
9836	Happy Feet	2006	108
9880	The Princess Diaries	2001	115
10264	Hamlet	1990	130
10528	Sherlock Holmes	2009	128
10549	Hamlet	1996	242
10688	Hamlet	2000	112
12444	Harry Potter and the Deathly Hallows: Part 1	2010	146
12445	Harry Potter and the Deathly Hallows: Part 2	2011	130
27578	The Expendables	2010	103
49026	The Dark Knight Rises	2012	165
70160	The Hunger Games	2012	142
82695	Les Miserables	2012	157
316023	Mike & Dave Need Wedding Dates	2016	98
*			

Pass 1e

Paste your screen capture(s) for this task here.

Member3240

Field Name	Data Type	Description (Optional)
Membid	Number	Membid is the primary key
Surname	Short Text	
Givenname	Short Text	
Birthdate	Date/Time	

Field Properties

General | Lookup

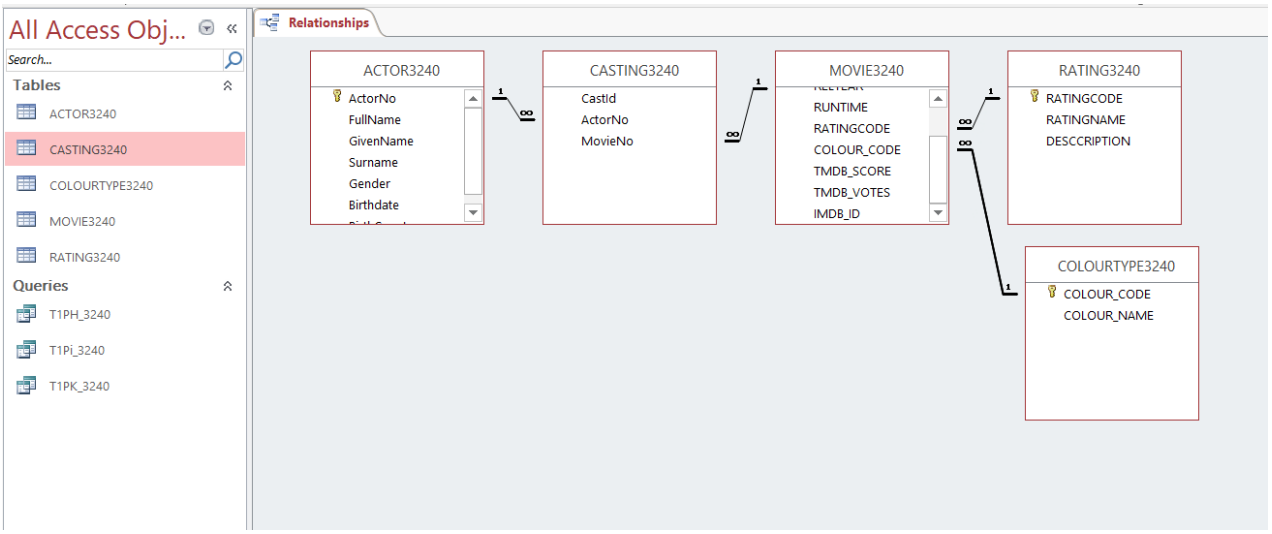
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	Yes
Indexed	Yes (No Duplicates)
Text Align	General

Member3240

Membid	Surname	Givenname	Birthdate
1	Bonnet	Claudia	3/18/1977
2	Joly	Herve	7/6/1995
3	Chang	Dimitri	10/16/2011
4	Verne	Jules	3/24/1905
5	Herbert	Frank	10/8/1920
102763240	Baig	Khalid	4/11/2002
0			

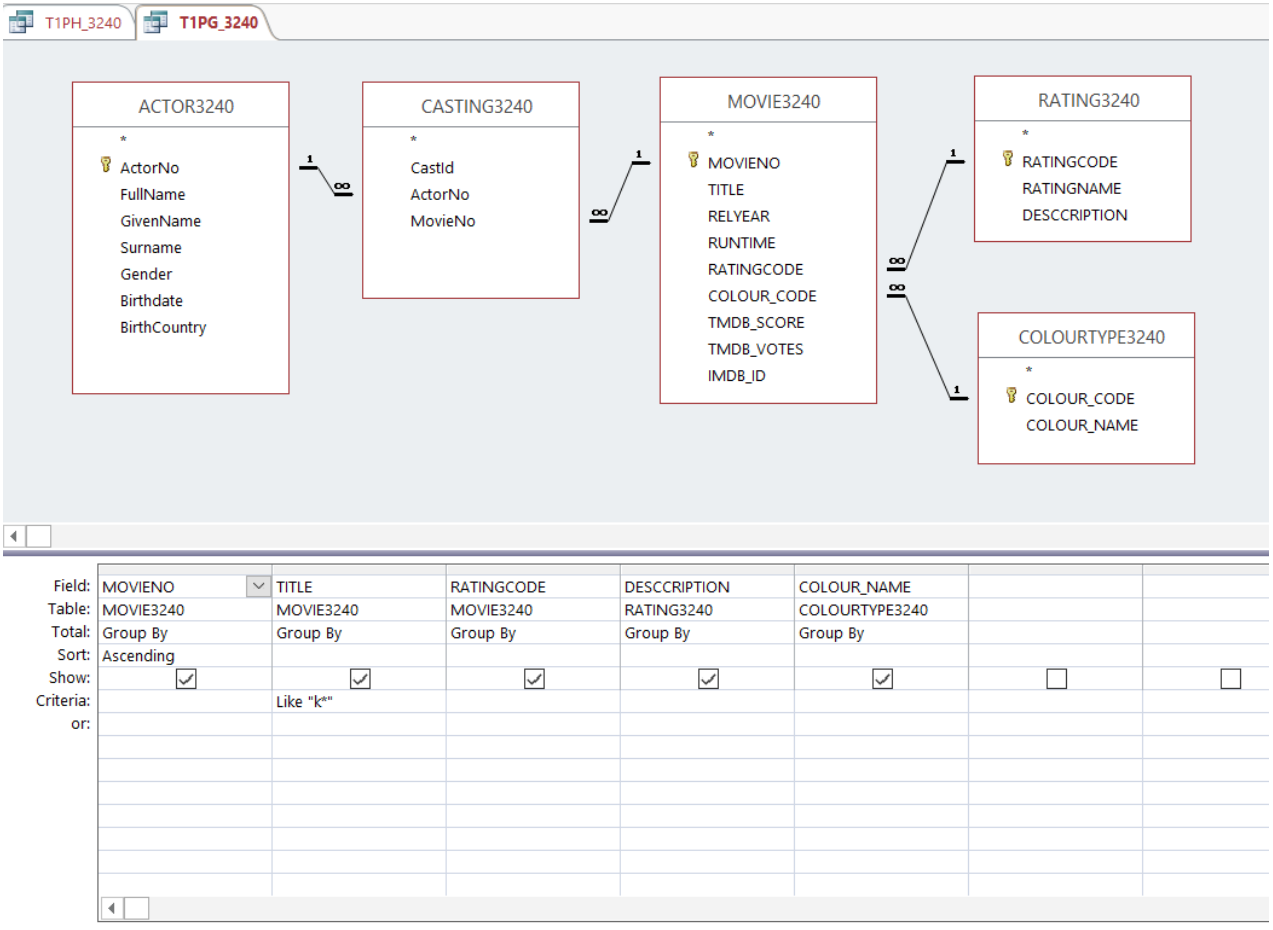
Pass 1f

Paste your screen capture(s) for this task here.



Pass 1g

Paste your screen capture(s) for this task here.



T1PH_3240 | T1PG_3240

MOVIENO	TITLE	RATINGCODE	DESCCRIPTION	COLOUR_NAME
24	Kill Bill: Vol. 1	MA	Parental guidance recommended for persons under 15 years	Colour movie
254	King Kong	M	Persons under 15 years must be accompanied by a mature adult	Colour movie
393	Kill Bill: Vol. 2	MA	Parental guidance recommended for persons under 15 years	Colour movie
9502	Kung Fu Panda	PG	Recommended for mature audiences 15 years and over	Colour movie

Q How many movies have titles that begins with the phrase ‘Forrest’?

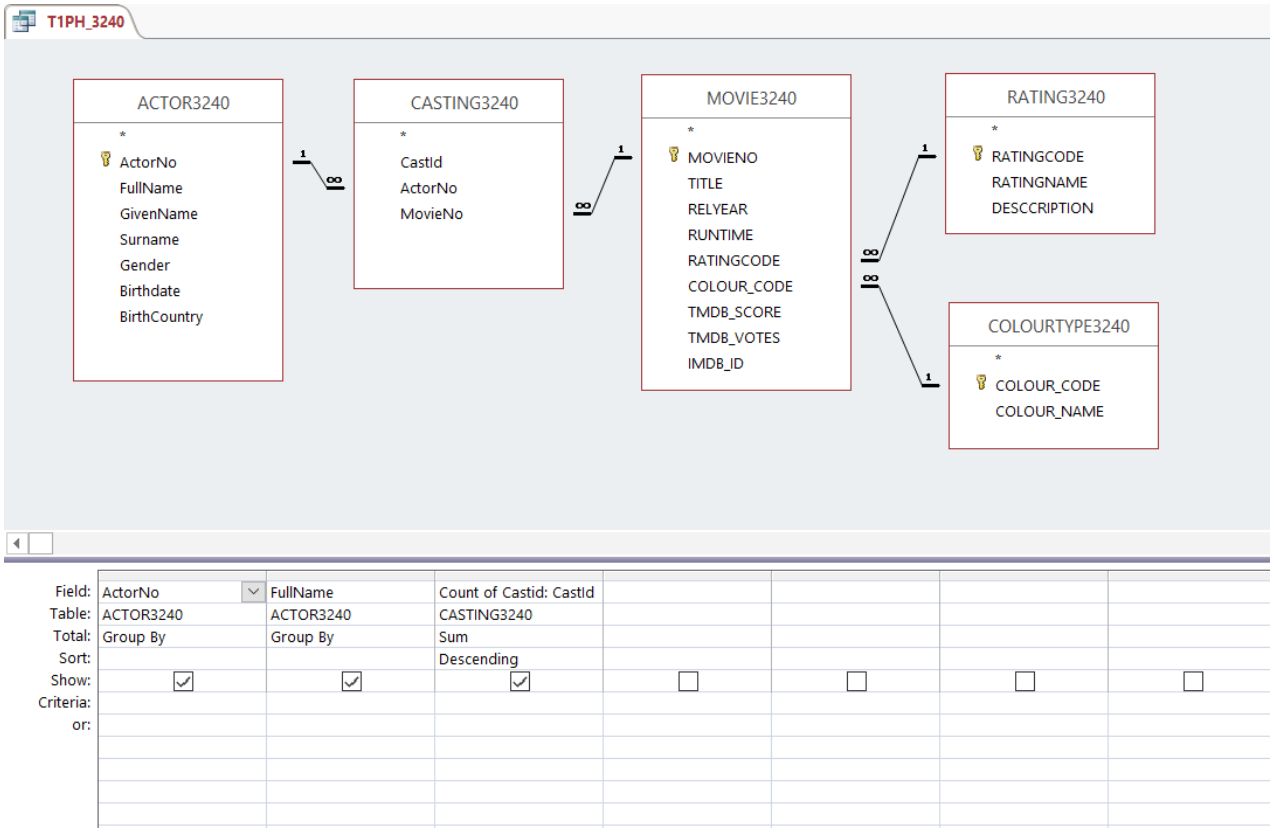
Ans. Null

Q. How many movies have a RATINGCODE = ‘M’ and title that begins with the letter ‘L’?

Ans. 3 movies

Pass 1h

Paste your screen capture(s) for this task here.



Field:	ActorNo	FullName	Count of Castid: CastId				
Table:	ACTOR3240	ACTOR3240	CASTING3240				
Total:	Group By	Group By	Sum				
Sort:			Descending				
Show:	☑	☑	☑	☐	☐	☐	☐
Criteria:							
or:							

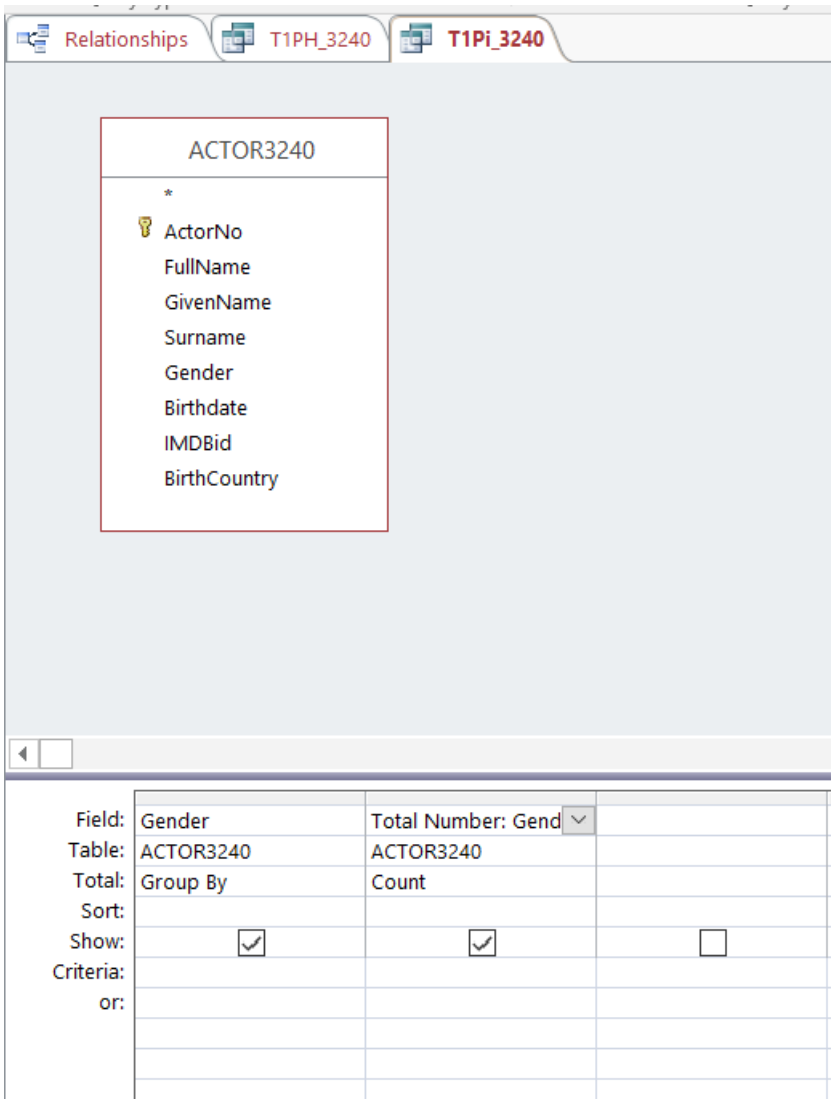
T1PH_3240

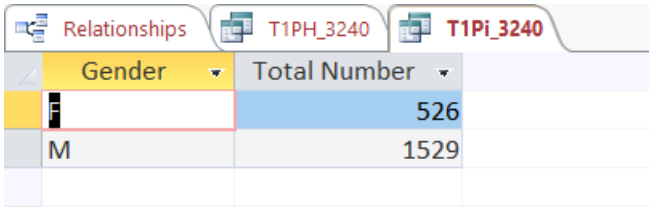
ActorNo	FullName	Count of Castid
7624	Stan Lee	16795
1283	Helena Bonham Carter	14475
1331	Hugo Weaving	13656
7399	Ben Stiller	13033
1923	Robbie Coltrane	12883
62	Bruce Willis	12056
192	Morgan Freeman	12042
4566	Alan Rickman	11971
1532	Bill Murray	11748
1892	Matt Damon	11417
477	Julie Walters	11410
3895	Michael Caine	10920
884	Steve Buscemi	10819
1813	Anne Hathaway	10712
10980	Daniel Radcliffe	10443
4038	Susan Sarandon	10073
64	Gary Oldman	10032
3223	Robert Downey Jr.	9744
19274	Seth Rogen	9663
10989	Rupert Grint	9632
113	Christopher Lee	9597
287	Brad Pitt	9569
4495	Steve Carell	9459
10978	Maggie Smith	9304
10993	Tom Felton	9281
11212	Josh Herdman	9069
887	Owen Wilson	8910
109	Elijah Wood	8848
9191	Timothy Spall	8754
1893	Casey Affleck	8730
7060	Martin Freeman	8594

Record: 1 of 470 No Filter Search

Pass 1i

Paste your screen capture(s) for this task here.





Pass 1j

Paste your screen capture(s) for this task here.

ACTOR3240

Field Name	Data Type	Description (Optional)
ActorNo	Number	
FullName	Short Text	
GivenName	Short Text	
Surname	Short Text	
Gender	Short Text	
Birthdate	Date/Time	
BirthCountry	Short Text	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	Yes (Duplicates OK)
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

ACTOR3240

Field Name	Data Type	Description (Optional)
ActorNo	Number	
FullName	Short Text	
GivenName	Short Text	
Surname	Short Text	
Gender	Short Text	
Birthdate	Date/Time	
BirthCountry	Short Text	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	Yes (Duplicates OK)
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

ACTOR3240

Field Name	Data Type	Description (Optional)
ActorNo	Number	
FullName	Short Text	
GivenName	Short Text	
Surname	Short Text	
Gender	Short Text	
Birthdate	Date/Time	
BirthCountry	Short Text	

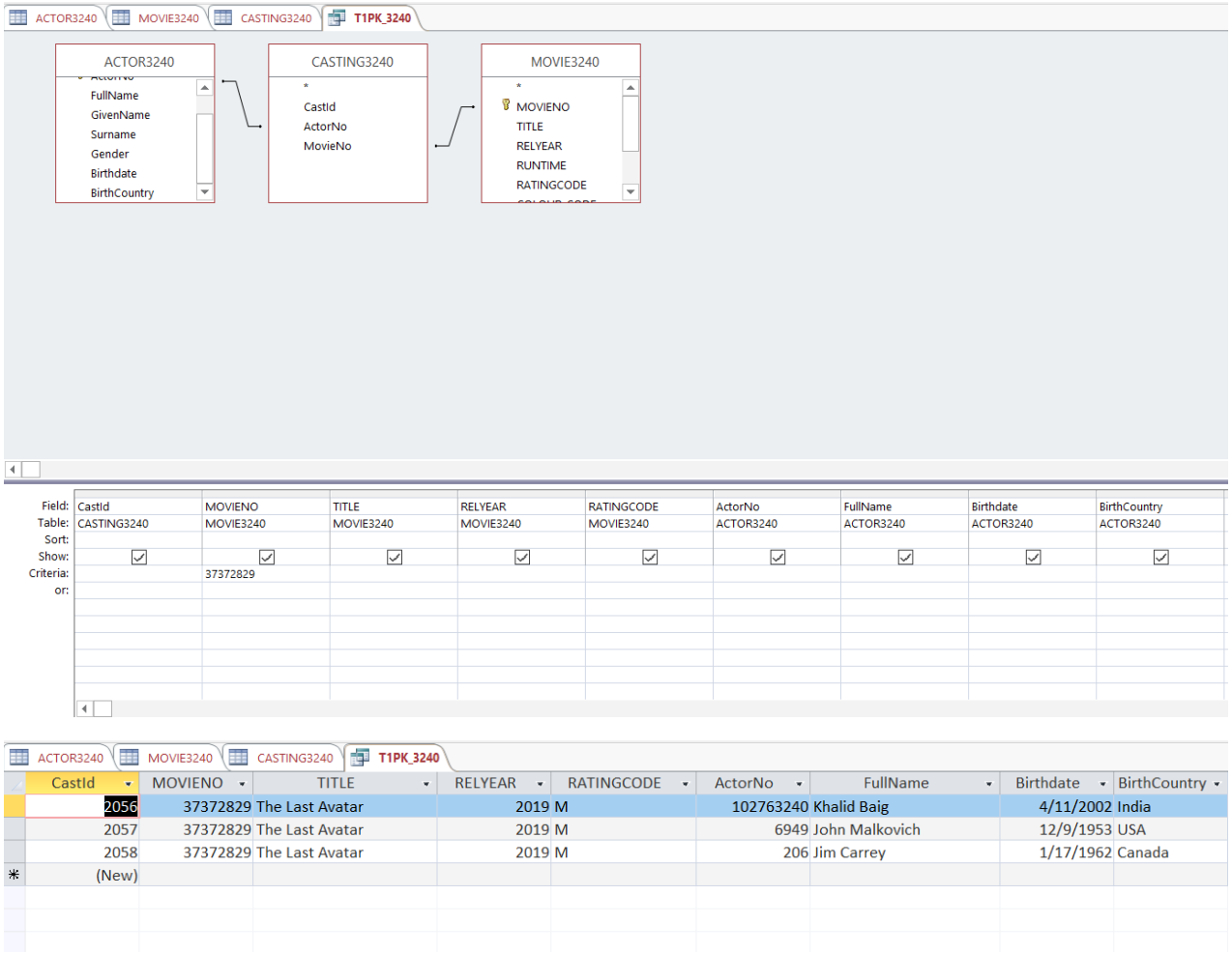
Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	Yes (Duplicates OK)
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

Pass 1k

Paste your screen capture(s) for this task here.



CastId	MOVIENO	TITLE	RELYEAR	RATINGCODE	ActorNo	FullName	Birthdate	BirthCountry
2056	37372829	The Last Avatar	2019	M	102763240	Khalid Baig	4/11/2002	India
2057	37372829	The Last Avatar	2019	M	6949	John Malkovich	12/9/1953	USA
2058	37372829	The Last Avatar	2019	M	206	Jim Carrey	1/17/1962	Canada
(New)								

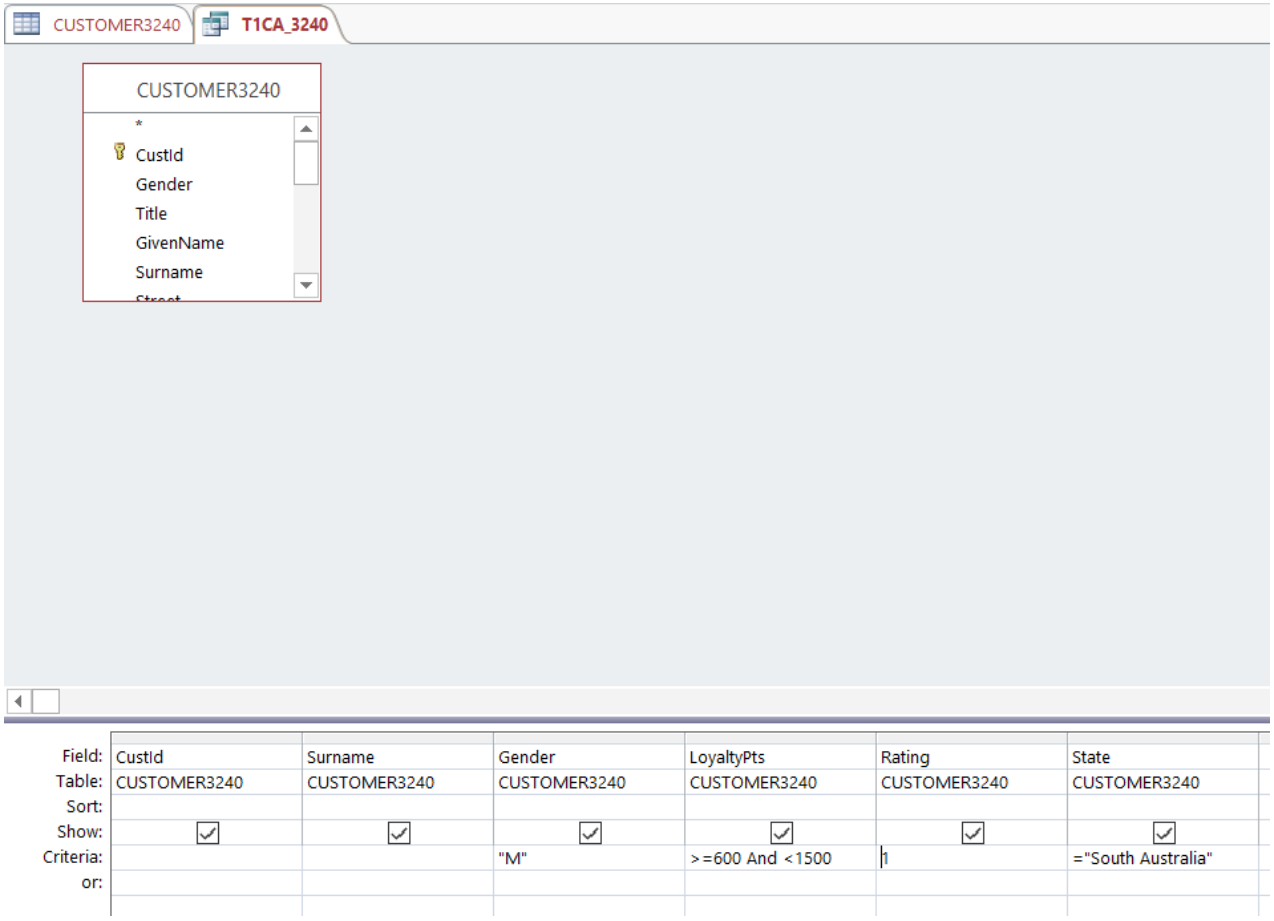
Database Analysis & Design
INF10002

Task 1 – Credit Submission

Student Number: Khalid Yaseen Baig
Student Name: 102763240

Credit 1a

Paste your screen capture(s) for this task here.

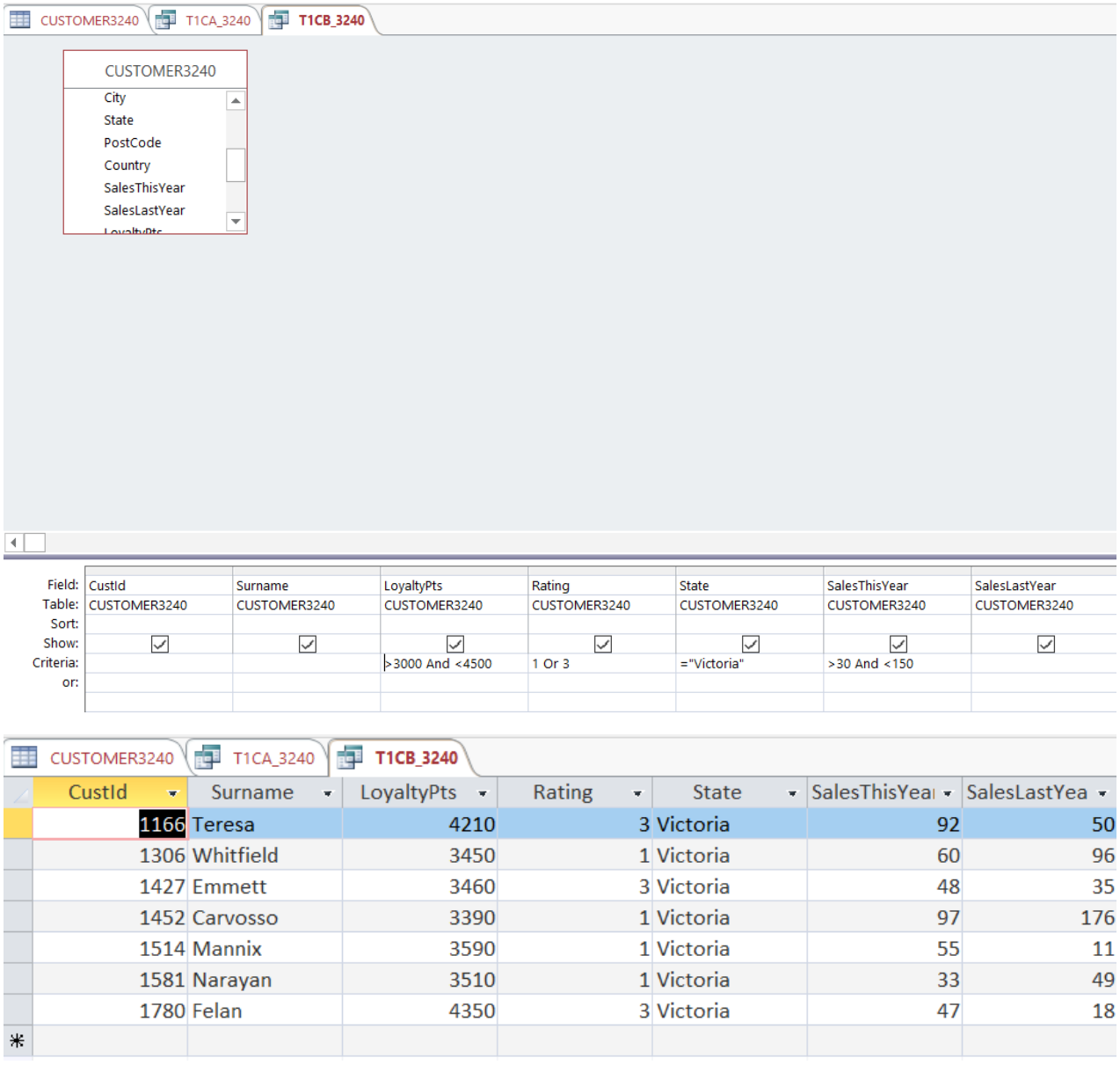


CUSTOMER3240 | T1CA_3240

CustId	Surname	Gender	LoyaltyPts	Rating	State
1860	Trethowan	M	740	1	South Australia
1977	Anna	M	1450	1	South Australia
2087	Trollope	M	1020	1	South Australia
2126	Focken	M	1320	1	South Australia
2133	Fatnowna	M	1250	1	South Australia
2228	Southern	M	930	1	South Australia
2581	Caire	M	1290	1	South Australia
3377	Trout	M	1320	1	South Australia

Credit 1b

Paste your screen capture(s) for this task here.

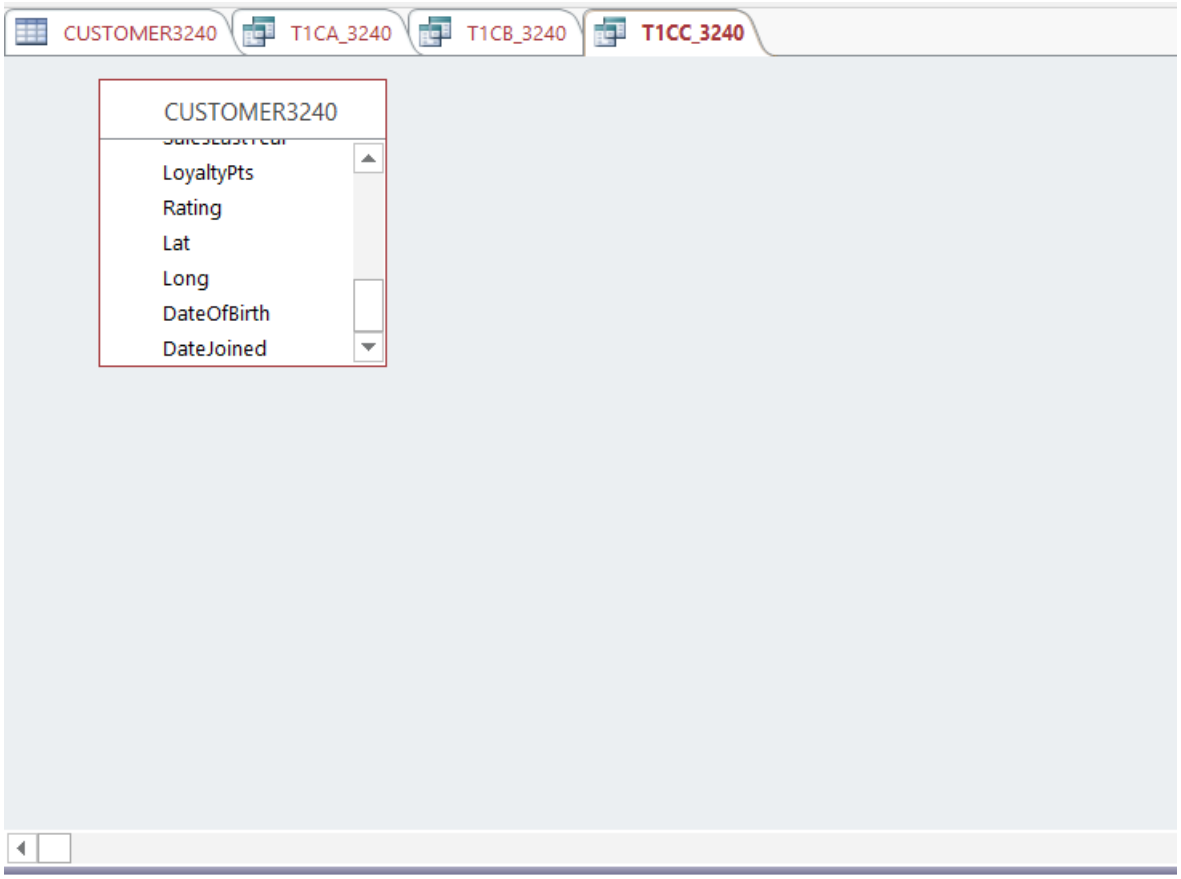


CUSTOMER3240 | T1CA_3240 | T1CB_3240

CustId	Surname	LoyaltyPts	Rating	State	SalesThisYea	SalesLastYea
1166	Teresa	4210	3	Victoria	92	50
1306	Whitfield	3450	1	Victoria	60	96
1427	Emmett	3460	3	Victoria	48	35
1452	Carvosso	3390	1	Victoria	97	176
1514	Mannix	3590	1	Victoria	55	11
1581	Narayan	3510	1	Victoria	33	49
1780	Felan	4350	3	Victoria	47	18

Credit 1c

Paste your screen capture(s) for this task here.



Field:	CustId	GivenName	Surname	DateOfBirth
Table:	CUSTOMER3240	CUSTOMER3240	CUSTOMER3240	CUSTOMER3240
Sort:			Ascending	
Show:	☑	☑	☑	☑
Criteria:				>#11/30/2000# And <#7/30/2003#
or:				

CUSTOMER3240 | T1CA_3240 | T1CB_3240 | **T1CC_3240**

CustId	GivenName	Surname	DateOfBirth
2235	Matthew	Brierly	2/10/2002
2494	Sienna	Curtin	4/10/2003
3391	Liao	Huifang	6/5/2002
1079	Piper	Lazarev	4/8/2001
3916	David	Maconochie	7/10/2003
3068	Jessica	Seekamp	2/10/2003
*			

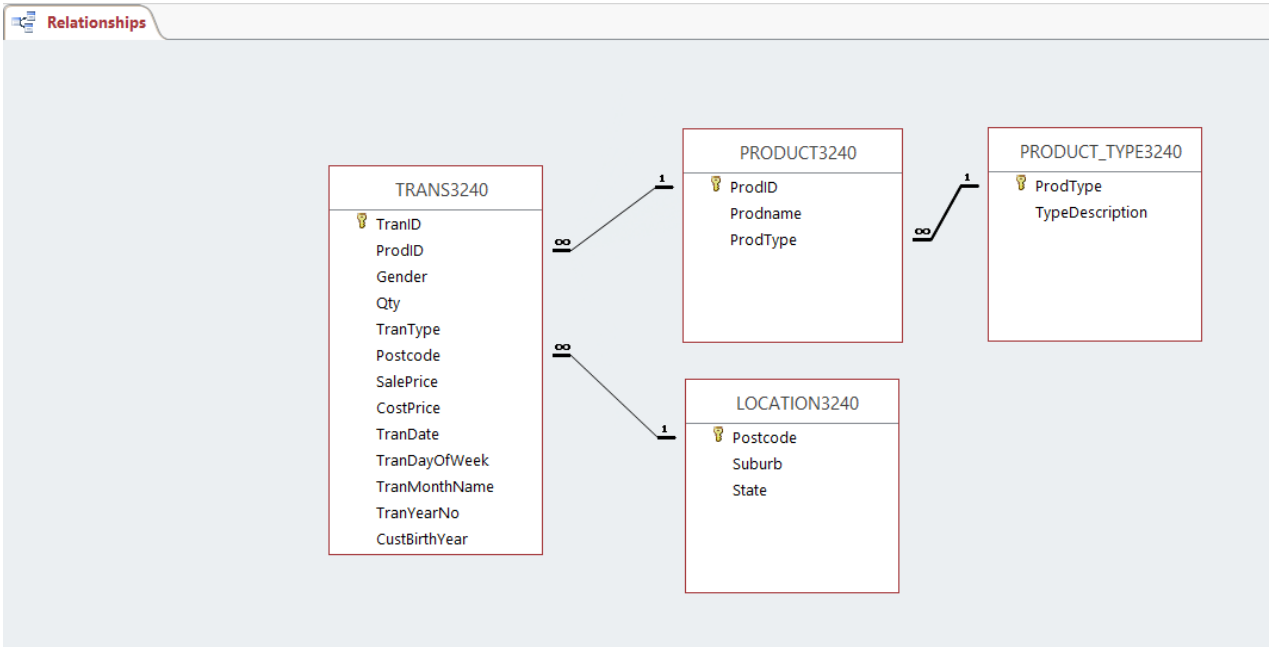
Credit 1d

Paste your screen capture(s) for this task here.

3992	F	Ms.	Ruby	Braim	3 Woodwark Rc	Mabuiag Island	Queensland	4875	Australia	648	1193	3290	1	-10.12
3993	M	Mr.	Callum	Polini	19/87 Hill Court	Strathgordon	Tasmania	7139	Australia	120	218	340	1	-42.73
3994	M	Mr.	Ping	Deshi	87 Bayfield Driv	Copping	Tasmania	7140	Australia	2969	1396	5950	2	-42.73
3995	F	Ms.	Abbey	Laseron	17/85 Rupara R	Hope Valley	South Australia	5090	Australia	0	0	6020	2	-34.85
3996	M	Mr.	Andrew	Dorron	58 Bayfield Roa	Copping	Tasmania	7174	Australia	998	1198	8420	2	-42.87
3997	M	Mr.	David	Kates	24 Rupara Rd	Hope Valley	South Australia	5090	Australia	219	268	7580	1	-34.85
3998	M	Mr.	Michael	Diggles	32 Bayfield Roa	Highcroft	Tasmania	7183	Australia	899	1178	7160	1	-43.13
4000	F	Ms.	Maddison	Goodenough	32 Village Boule	Edmondson Par	New South Wal	2174	Australia	0	0	970	2	-33.95
102763240	M	Mr.	Khalid	Baig	48 mideast	Kuching	Sarawak	7930	Malaysia	4798	3370	9130	5	-37.89

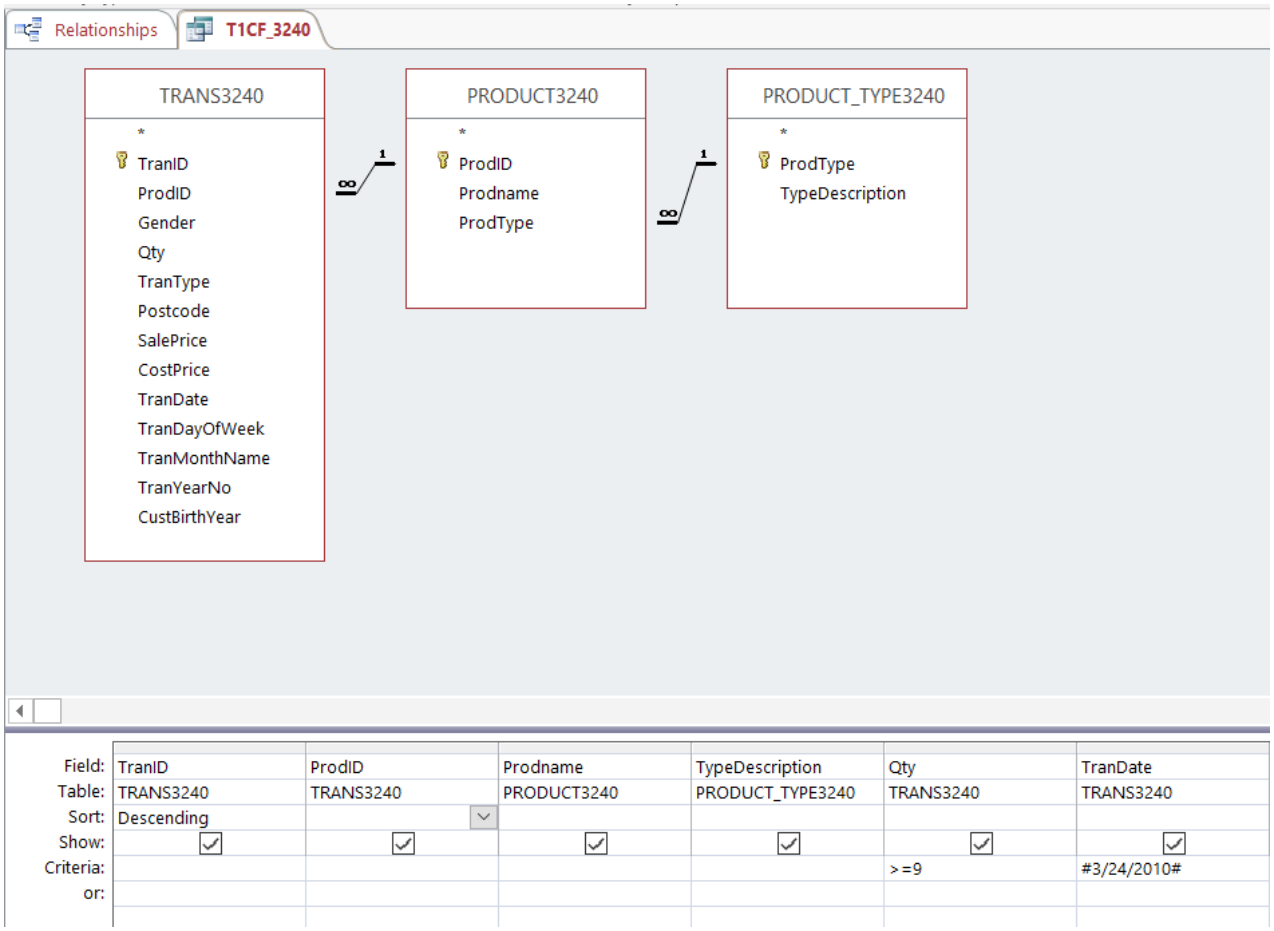
Credit 1e

Paste your screen capture(s) for this task here.



Credit 1f

Paste your screen capture(s) for this task here.



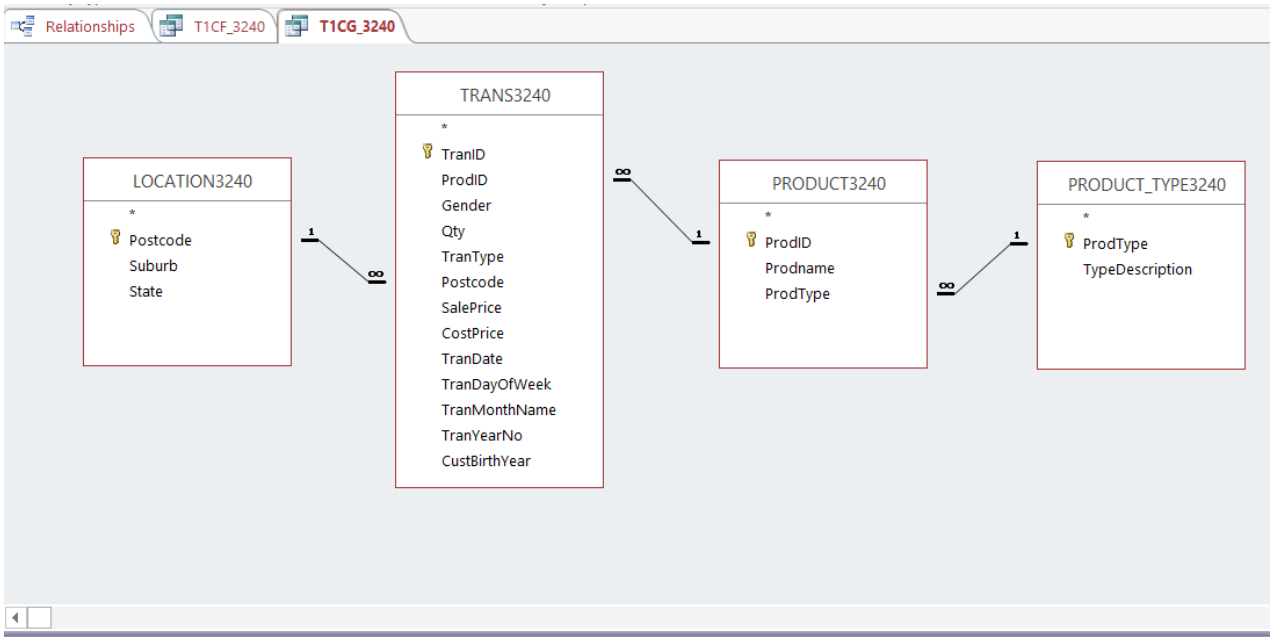
Field:	TranID	ProdID	Prodname	TypeDescription	Qty	TranDate
Table:	TRANS3240	TRANS3240	PRODUCT3240	PRODUCT_TYPE3240	TRANS3240	TRANS3240
Sort:	Descending					
Show:	☑	☑	☑	☑	☑	☑
Criteria:					>=9	#3/24/2010#
or:						

Relationships | T1CF_3240 | T1CG_3240

TranID	ProdID	Prodname	TypeDescript	Qty	TranDate
91813419	40	Solo One	Pharmacy	10	3/24/2010
56864314	33	Zummalax	LifeStyle	20	3/24/2010
7316631	72	Tresplus	LifeStyle	10	3/24/2010
4733920	72	Tresplus	LifeStyle	10	3/24/2010
*					

Credit 1g

Paste your screen capture(s) for this task here.



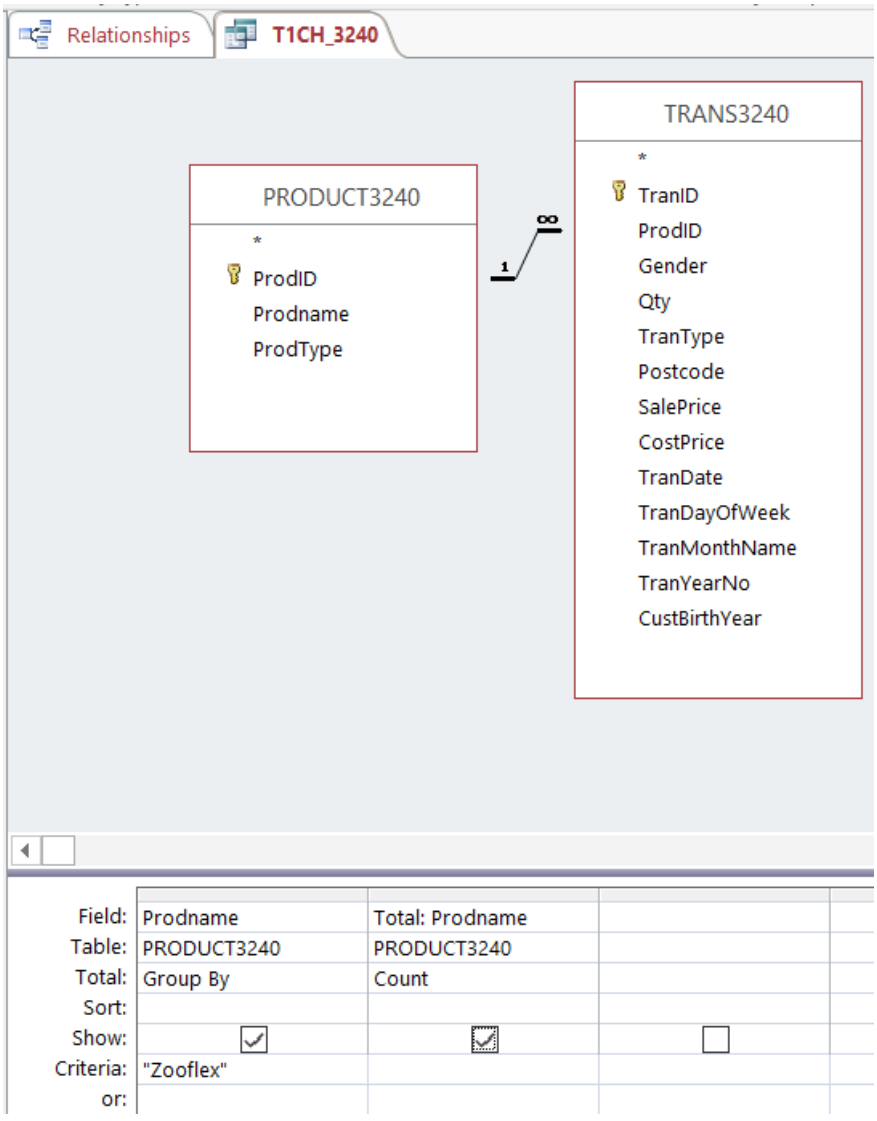
Field:	TranDate	TranID	Prodname	SalePrice	Qty	Suburb	CustBirthYear
Table:	TRANS3240	TRANS3240	PRODUCT3240	TRANS3240	TRANS3240	LOCATION3240	TRANS3240
Sort:	Ascending						
Show:	☑	☑	☑	☑	☑	☑	☑
Criteria:			"Kancof" Or "Zooflex"			"Lilydale"	
or:							

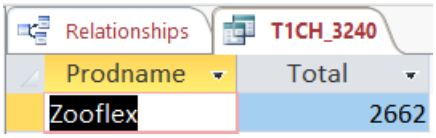
Relationships | T1CF_3240 | T1CG_3240

TranDate	TranID	Prodname	SalePrice	Qty	Suburb	CustBirthYear
2/9/2010	93989425	Kancof	$65.50	1	LILYDALE	1971
6/28/2010	50522197	Zooflex	$49.00	10	LILYDALE	1957
11/1/2010	75673580	Zooflex	$49.00	3	LILYDALE	1964
1/8/2011	12312209	Kancof	$68.80	9	LILYDALE	1945
2/9/2011	51661499	Kancof	$68.80	4	LILYDALE	1946
8/1/2012	29972550	Kancof	$72.00	6	LILYDALE	1942
3/4/2013	95398771	Kancof	$75.30	8	LILYDALE	1948
7/18/2013	18778264	Kancof	$75.30	5	LILYDALE	1974
10/1/2013	44762921	Zooflex	$56.40	3	LILYDALE	1963
10/18/2013	68786147	Zooflex	$56.40	9	LILYDALE	1951
*						

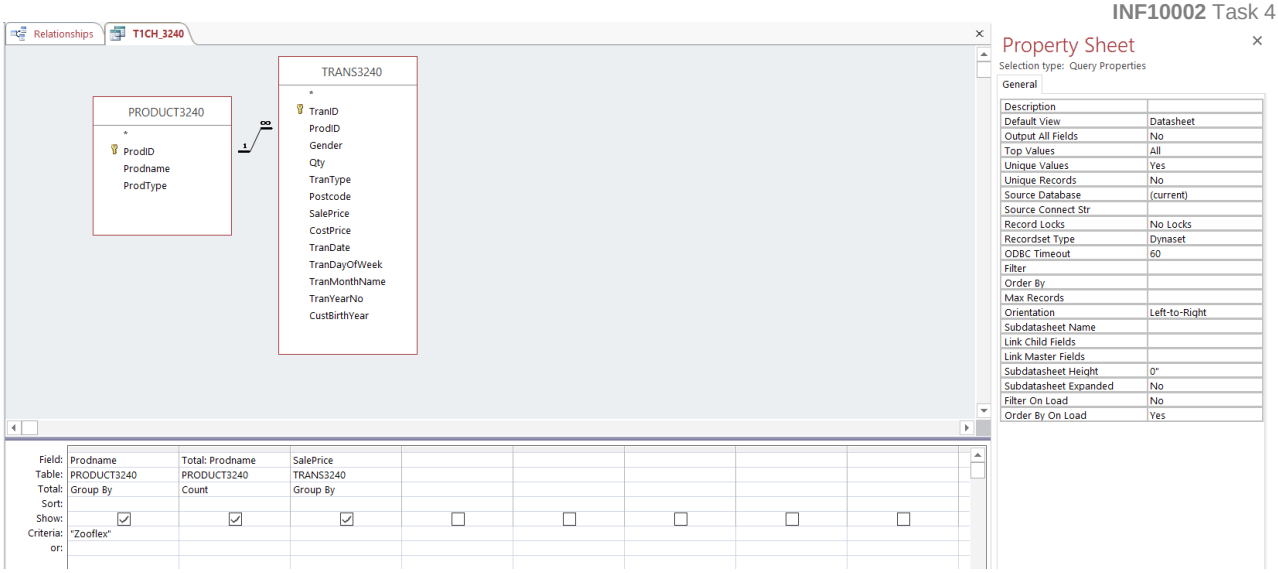
Credit 1h

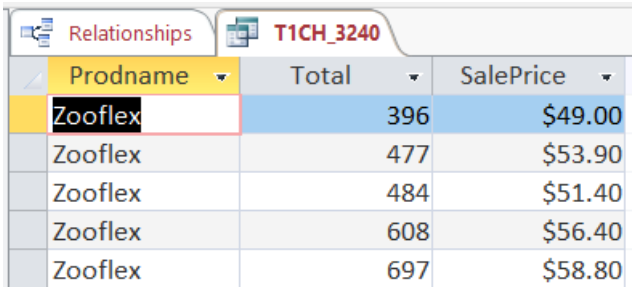
Paste your screen capture(s) for this task here.





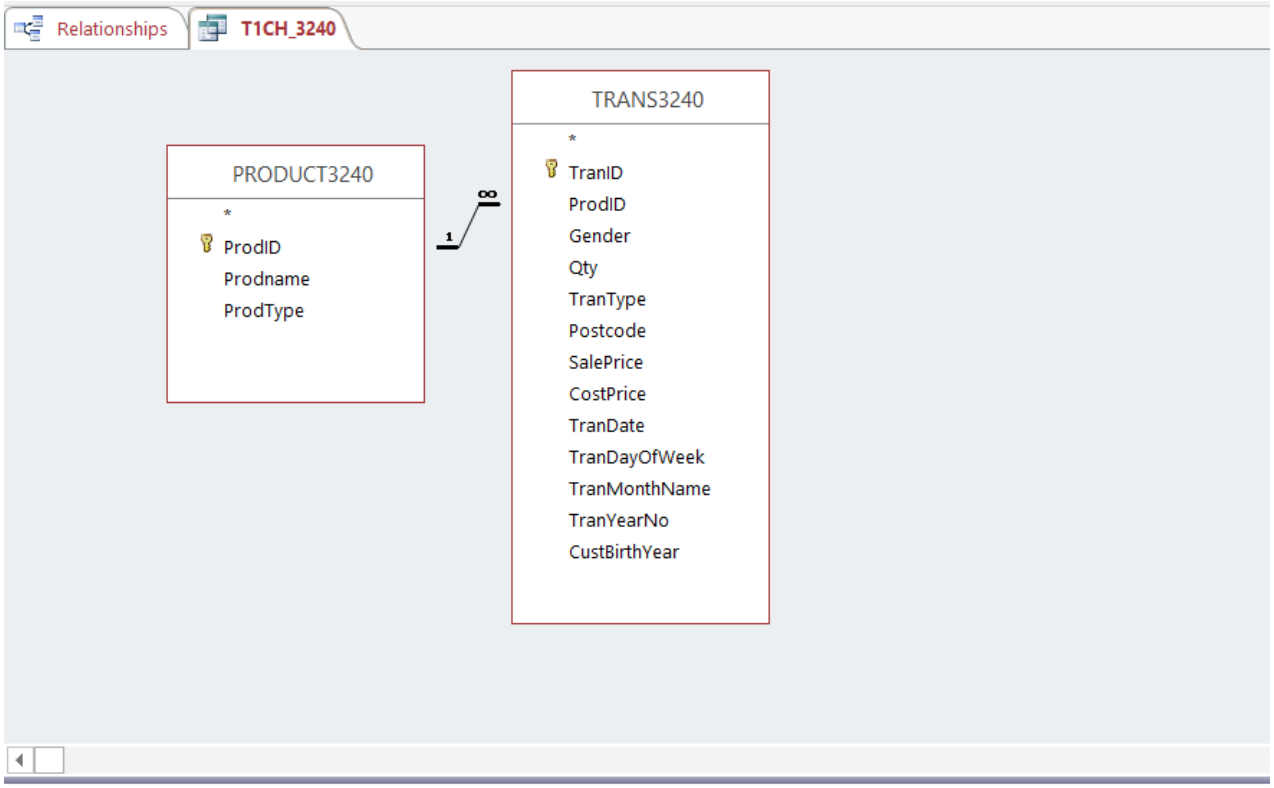
We Can Conclude that the Product has been sold 2662 times.





Prodname	Total	SalePrice
Zooflex	396	$49.00
Zooflex	477	$53.90
Zooflex	484	$51.40
Zooflex	608	$56.40
Zooflex	697	$58.80

We can conclude that the product has been sold at 5 different prices.



Field:	Prodname	Total: Prodname	SalePrice	TranDate
Table:	PRODUCT3240	PRODUCT3240	TRANS3240	TRANS3240
Total:	Group By	Count	Group By	Group By
Sort:				Ascending
Show:	☑	☐	☑	☑
Criteria:	"Zooflex"			#1/1/2011# Or #1/1/2012# Or #1/1/2013# Or #1/10/2014#
or:				

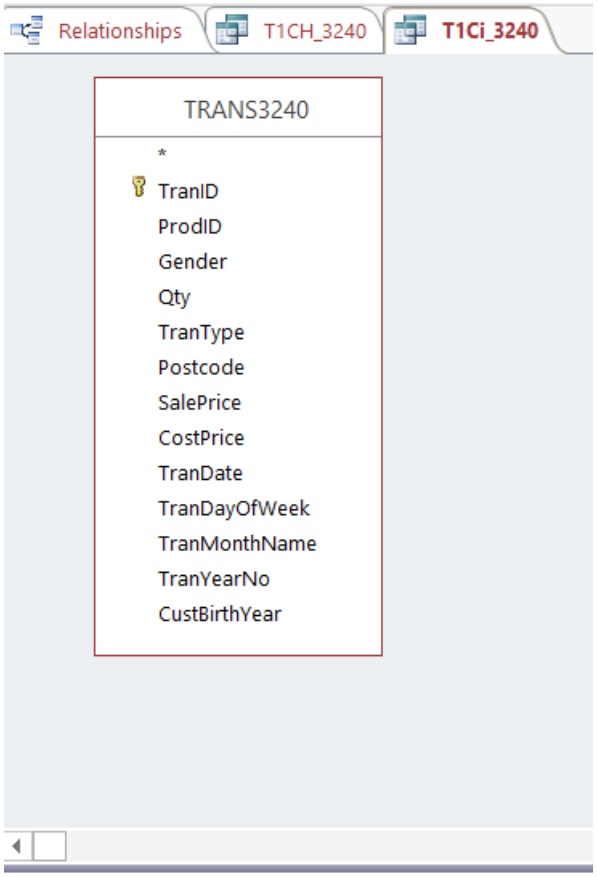
Relationships | T1CH_3240

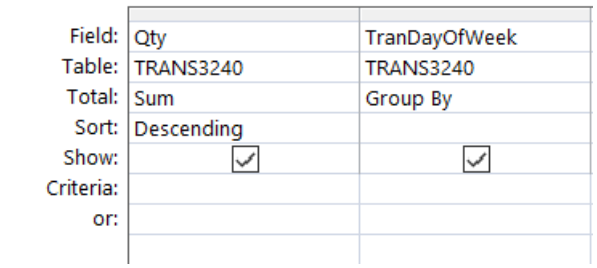
Prodname	SalePrice	TranDate
Zooflex	$51.40	1/1/2011
Zooflex	$53.90	1/1/2012
Zooflex	$56.40	1/1/2013
Zooflex	$58.80	1/10/2014

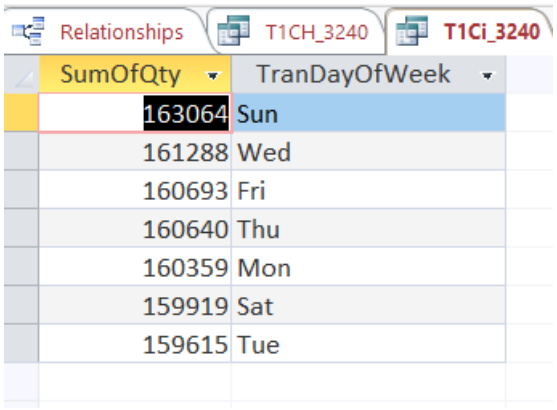
We can conclude that price of the above product has been increasing over the years.

Credit 1i

Paste your screen capture(s) for this task here.







Credit 1j

Paste your screen capture(s) for this task here.

Database Analysis & Design
INF10002

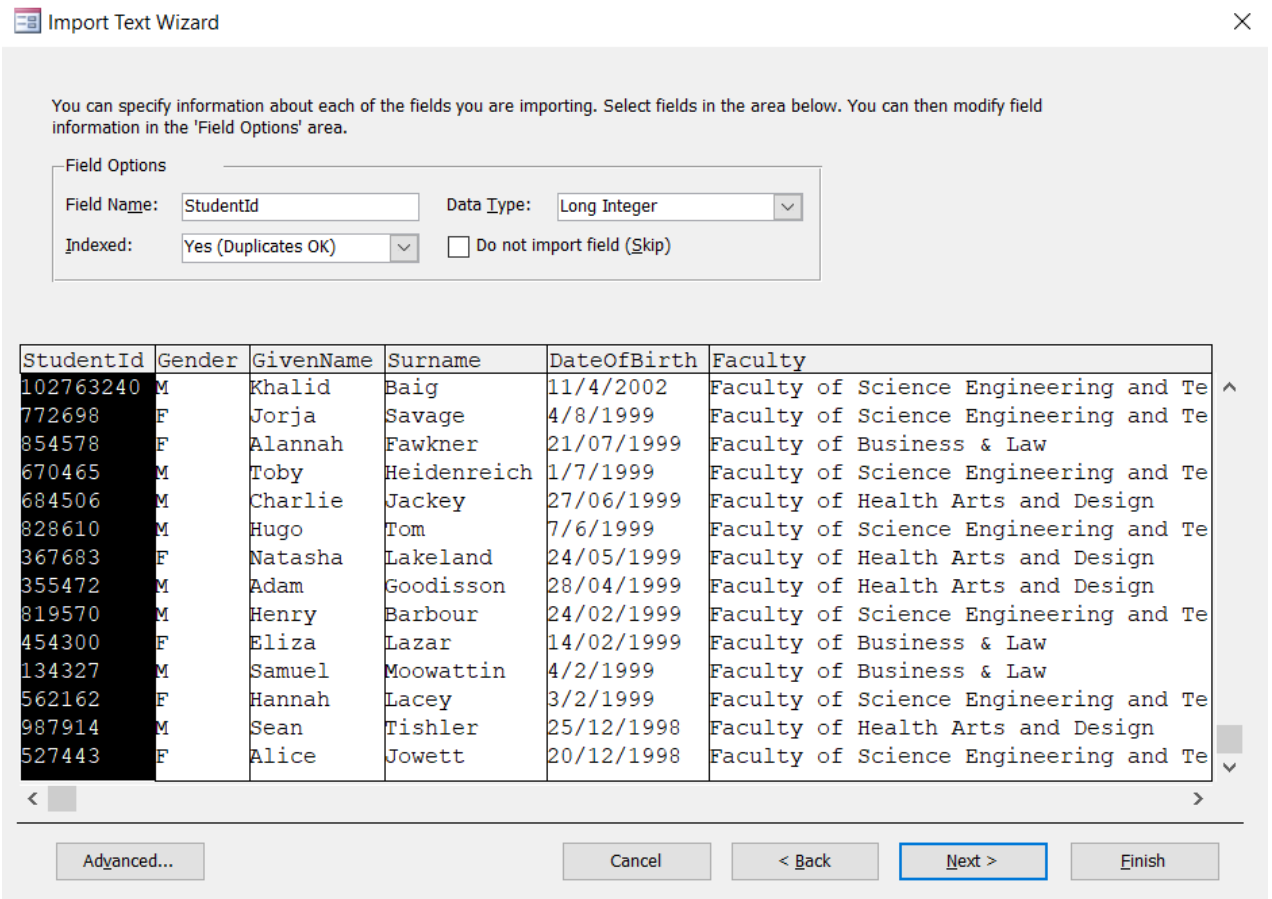
Task 2 – Pass Submission

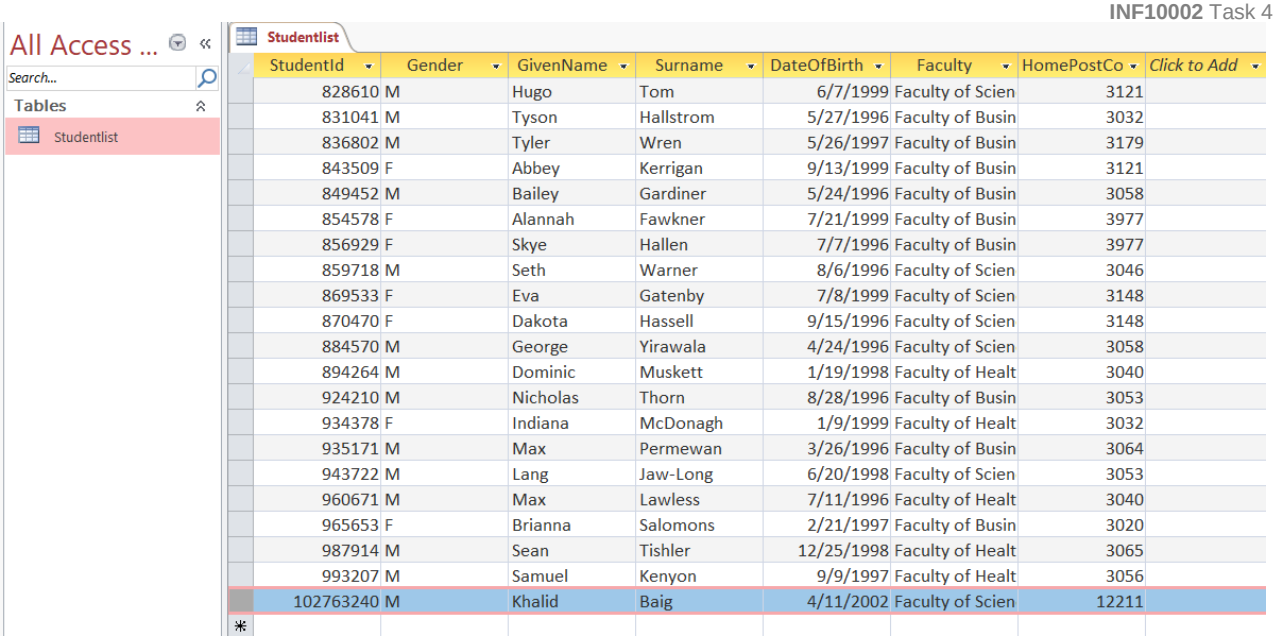
Student Number: 102763240
Student Name: Khalid Yaseen Baig

Pass 2a

Paste your screen capture(s) for this task here.

```
843509,F,Abbey,Kerrigan,13/09/1999,Faculty of Business & Law,3121
762199,F,Kiara,Ennor,17/08/1999,Faculty of Health Arts and Design,3030
102763240,M,Khalid,Baig,11/4/2002,Faculty of Science Engineering and Technology,12211
772698,F,Jorja,Savage,4/8/1999,Faculty of Science Engineering and Technology,3148
854578,F,Alannah,Fawkner,21/07/1999,Faculty of Business & Law,3977
670465,M,Toby,Heidenreich,1/7/1999,Faculty of Science Engineering and Technology,3020
684506,M,Charlie,Jackey,27/06/1999,Faculty of Health Arts and Design,3148
```

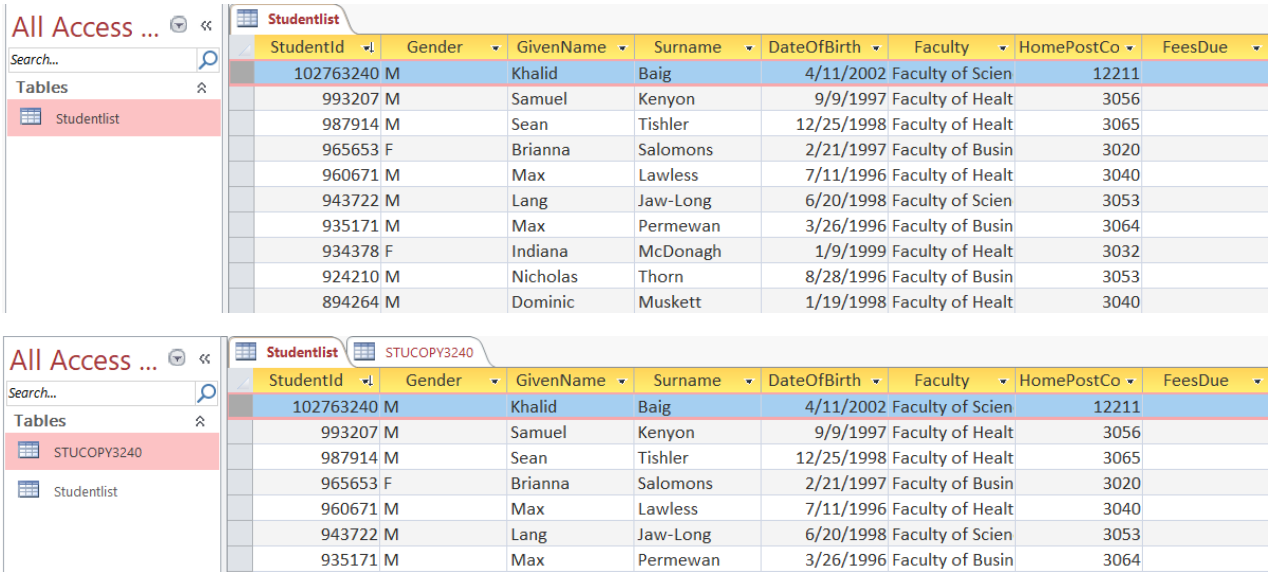




StudentId	Gender	GivenName	Surname	DateOfBirth	Faculty	HomePostCo	Click to Add
828610	M	Hugo	Tom	6/7/1999	Faculty of Scien	3121	
831041	M	Tyson	Hallstrom	5/27/1996	Faculty of Busin	3032	
836802	M	Tyler	Wren	5/26/1997	Faculty of Busin	3179	
843509	F	Abbey	Kerrigan	9/13/1999	Faculty of Busin	3121	
849452	M	Bailey	Gardiner	5/24/1996	Faculty of Busin	3058	
854578	F	Alannah	Fawkner	7/21/1999	Faculty of Busin	3977	
856929	F	Skye	Hallen	7/7/1996	Faculty of Busin	3977	
859718	M	Seth	Warner	8/6/1996	Faculty of Scien	3046	
869533	F	Eva	Gatenby	7/8/1999	Faculty of Scien	3148	
870470	F	Dakota	Hassell	9/15/1996	Faculty of Scien	3148	
884570	M	George	Yirawala	4/24/1996	Faculty of Scien	3058	
894264	M	Dominic	Muskett	1/19/1998	Faculty of Healt	3040	
924210	M	Nicholas	Thorn	8/28/1996	Faculty of Busin	3053	
934378	F	Indiana	McDonagh	1/9/1999	Faculty of Healt	3032	
935171	M	Max	Permewan	3/26/1996	Faculty of Busin	3064	
943722	M	Lang	Jaw-Long	6/20/1998	Faculty of Scien	3053	
960671	M	Max	Lawless	7/11/1996	Faculty of Healt	3040	
965653	F	Brianna	Salomons	2/21/1997	Faculty of Busin	3020	
987914	M	Sean	Tishler	12/25/1998	Faculty of Healt	3065	
993207	M	Samuel	Kenyon	9/9/1997	Faculty of Healt	3056	
102763240	M	Khalid	Baig	4/11/2002	Faculty of Scien	12211	

Pass 2b

Paste your screen capture(s) for this task here.



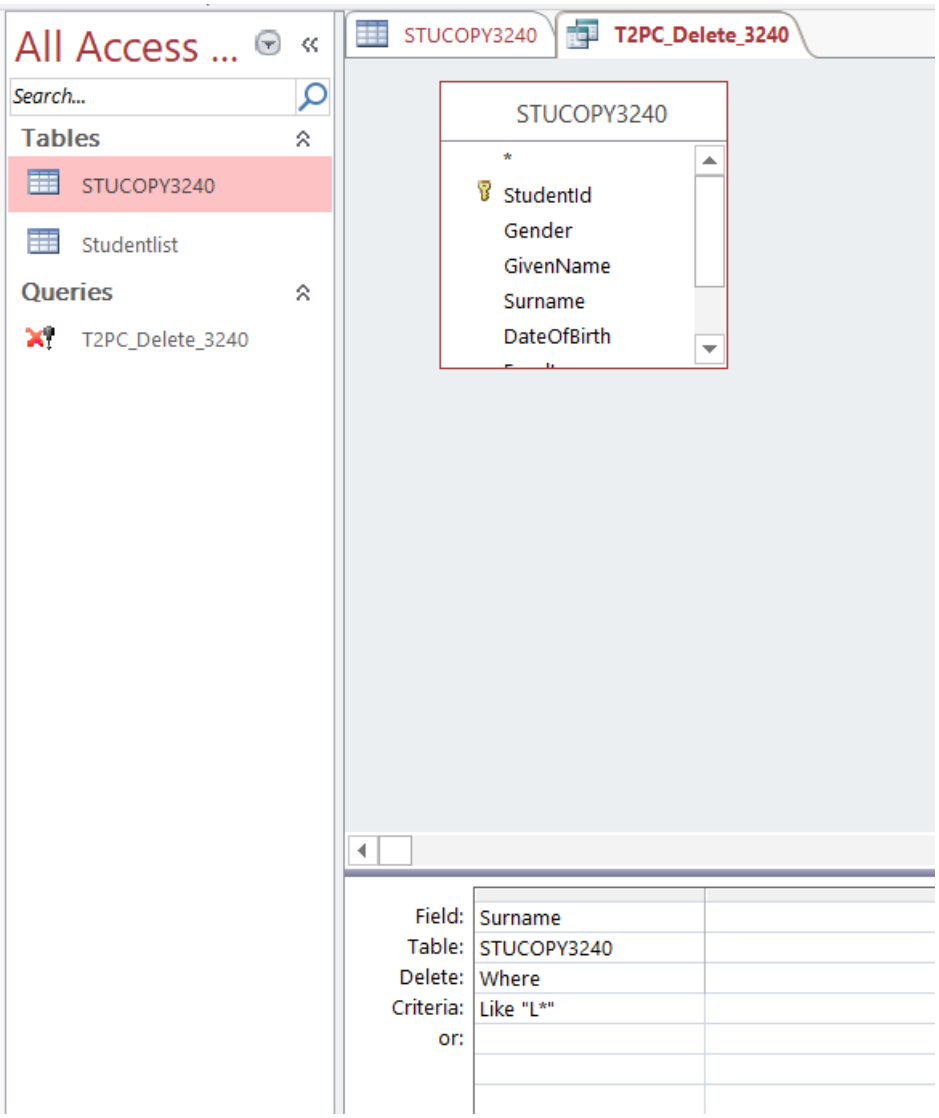
StudentId	Gender	GivenName	Surname	DateOfBirth	Faculty	HomePostCo	FeesDue
102763240	M	Khalid	Baig	4/11/2002	Faculty of Scien	12211	
993207	M	Samuel	Kenyon	9/9/1997	Faculty of Healt	3056	
987914	M	Sean	Tishler	12/25/1998	Faculty of Healt	3065	
965653	F	Brianna	Salomons	2/21/1997	Faculty of Busin	3020	
960671	M	Max	Lawless	7/11/1996	Faculty of Healt	3040	
943722	M	Lang	Jaw-Long	6/20/1998	Faculty of Scien	3053	
935171	M	Max	Permewan	3/26/1996	Faculty of Busin	3064	
934378	F	Indiana	McDonagh	1/9/1999	Faculty of Healt	3032	
924210	M	Nicholas	Thorn	8/28/1996	Faculty of Busin	3053	
894264	M	Dominic	Muskett	1/19/1998	Faculty of Healt	3040	

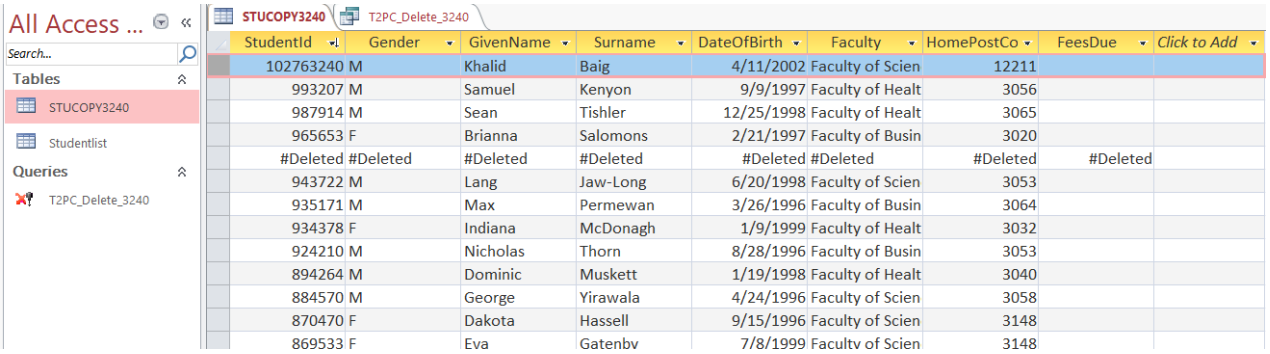
StudentId	Gender	GivenName	Surname	DateOfBirth	Faculty	HomePostCo	FeesDue
102763240	M	Khalid	Baig	4/11/2002	Faculty of Scien	12211	
993207	M	Samuel	Kenyon	9/9/1997	Faculty of Healt	3056	
987914	M	Sean	Tishler	12/25/1998	Faculty of Healt	3065	
965653	F	Brianna	Salomons	2/21/1997	Faculty of Busin	3020	
960671	M	Max	Lawless	7/11/1996	Faculty of Healt	3040	
943722	M	Lang	Jaw-Long	6/20/1998	Faculty of Scien	3053	
935171	M	Max	Permewan	3/26/1996	Faculty of Busin	3064	

Field Name	Data Type
StudentId	Number
Gender	Short Text
GivenName	Short Text
Surname	Short Text
DateOfBirth	Date/Time
Faculty	Short Text
HomePostCode	Number
FeesDue	Currency

Pass 2c

Paste your screen capture(s) for this task here.

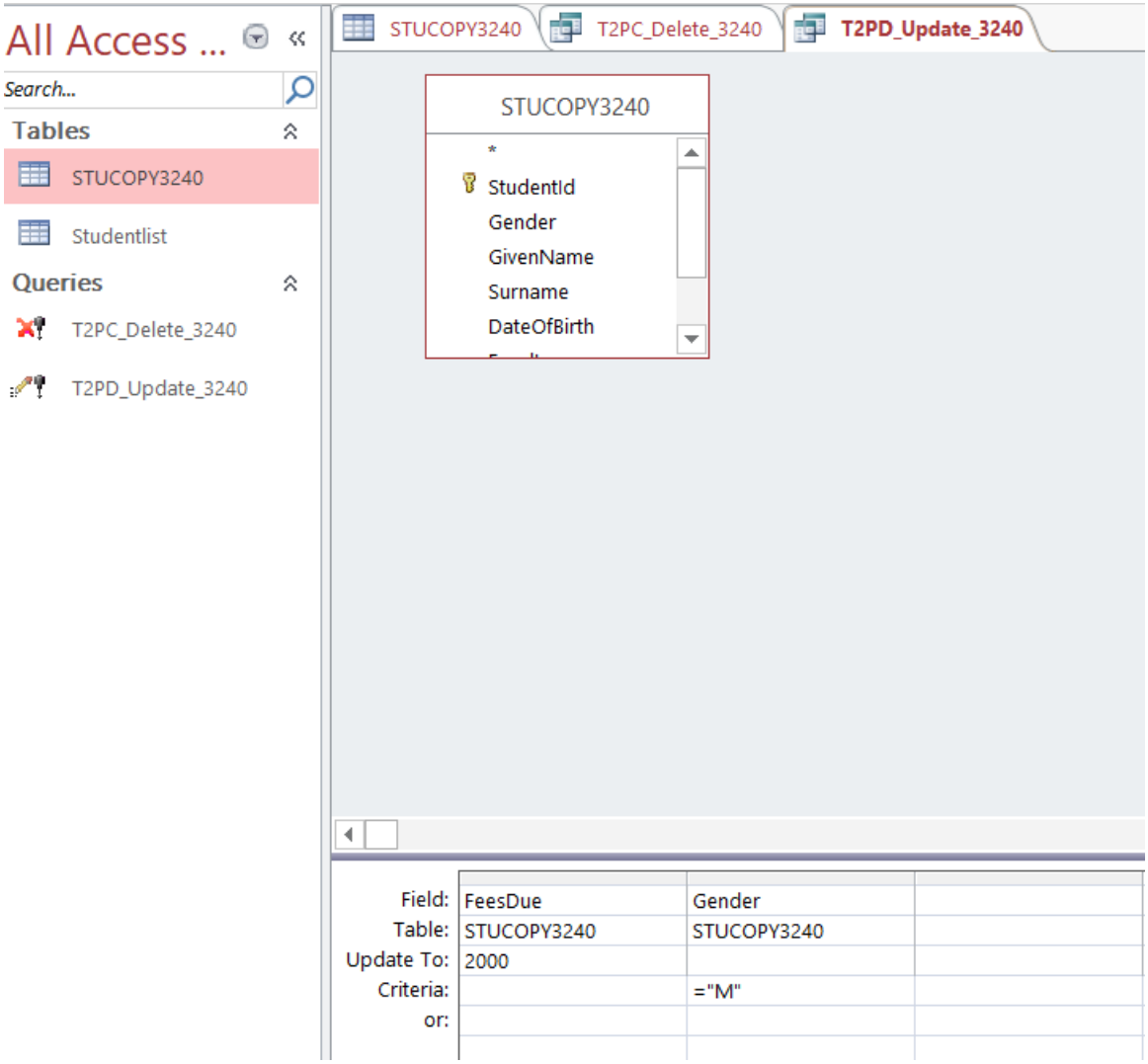


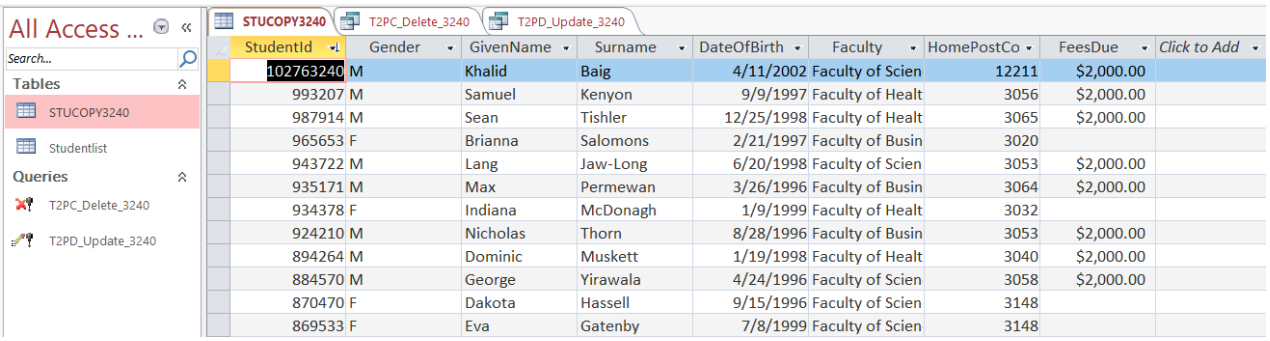


StudentId	Gender	GivenName	Surname	DateOfBirth	Faculty	HomePostCo	FeesDue	Click to Add
102763240	M	Khalid	Baig	4/11/2002	Faculty of Scien	12211		
993207	M	Samuel	Kenyon	9/9/1997	Faculty of Healt	3056		
987914	M	Sean	Tishler	12/25/1998	Faculty of Healt	3065		
965653	F	Brianna	Salomons	2/21/1997	Faculty of Busin	3020		
#Deleted	#Deleted	#Deleted	#Deleted	#Deleted	#Deleted	#Deleted	#Deleted	
943722	M	Lang	Jaw-Long	6/20/1998	Faculty of Scien	3053		
935171	M	Max	Permewan	3/26/1996	Faculty of Busin	3064		
934378	F	Indiana	McDonagh	1/9/1999	Faculty of Healt	3032		
924210	M	Nicholas	Thorn	8/28/1996	Faculty of Busin	3053		
894264	M	Dominic	Muskett	1/19/1998	Faculty of Healt	3040		
884570	M	George	Yirawala	4/24/1996	Faculty of Scien	3058		
870470	F	Dakota	Hassell	9/15/1996	Faculty of Scien	3148		
869533	F	Eva	Gatenby	7/8/1999	Faculty of Scien	3148		

Pass 2d

Paste your screen capture(s) for this task here.

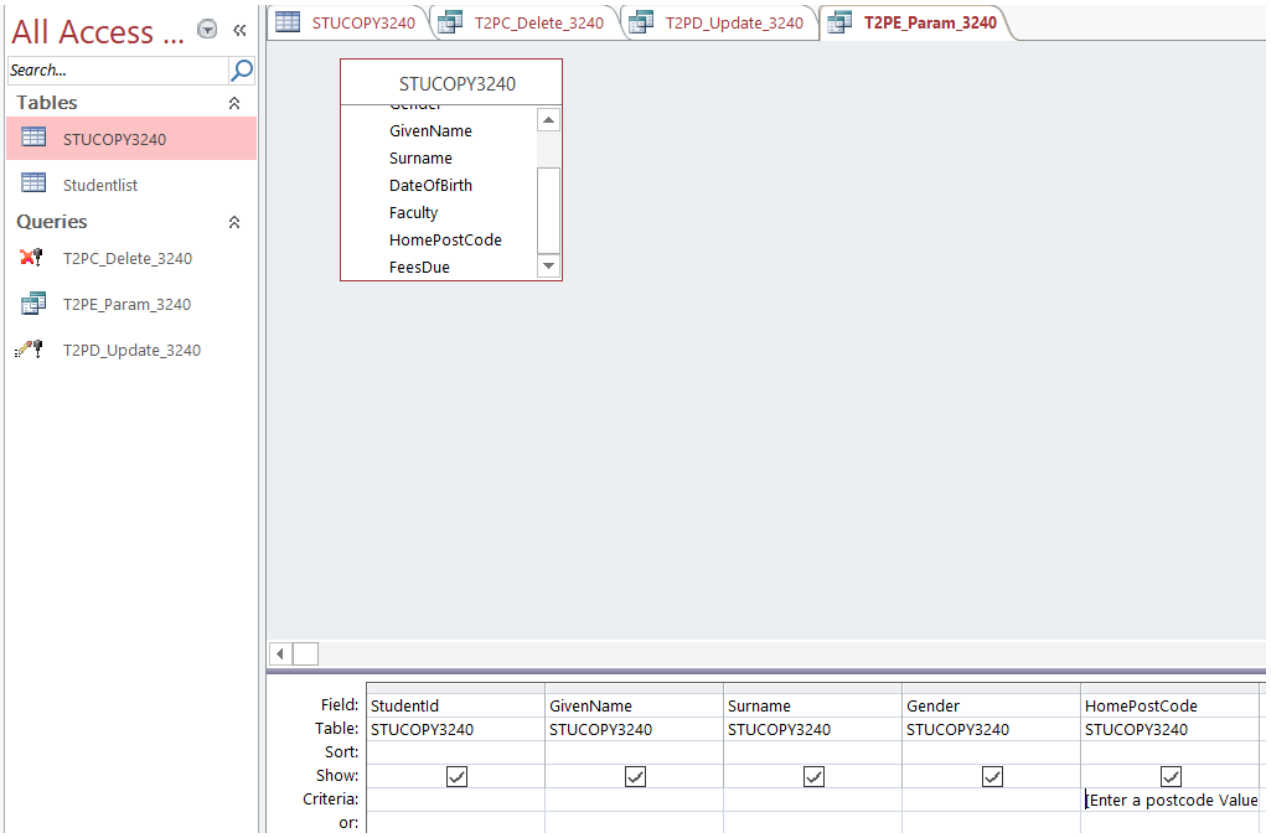


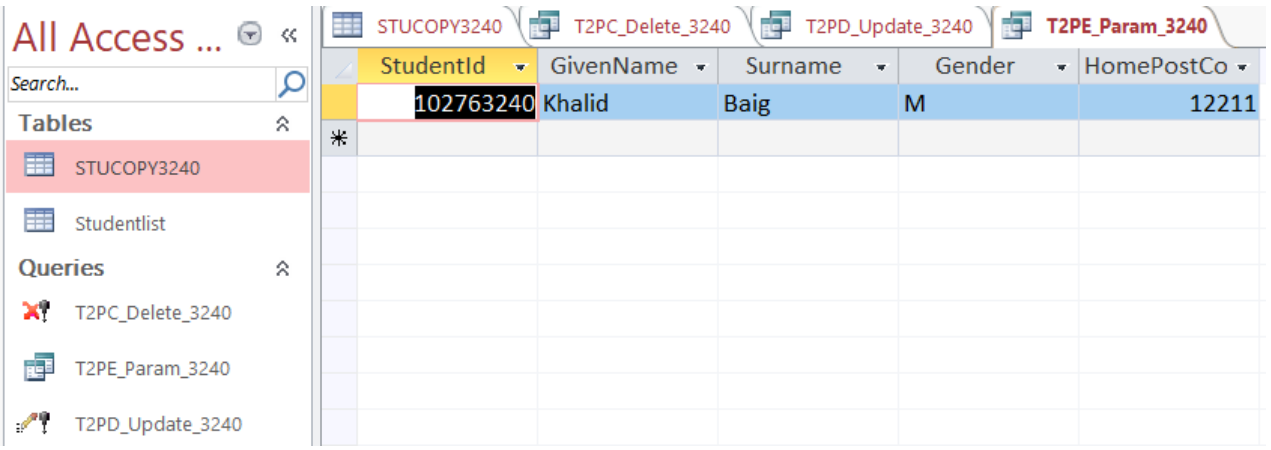


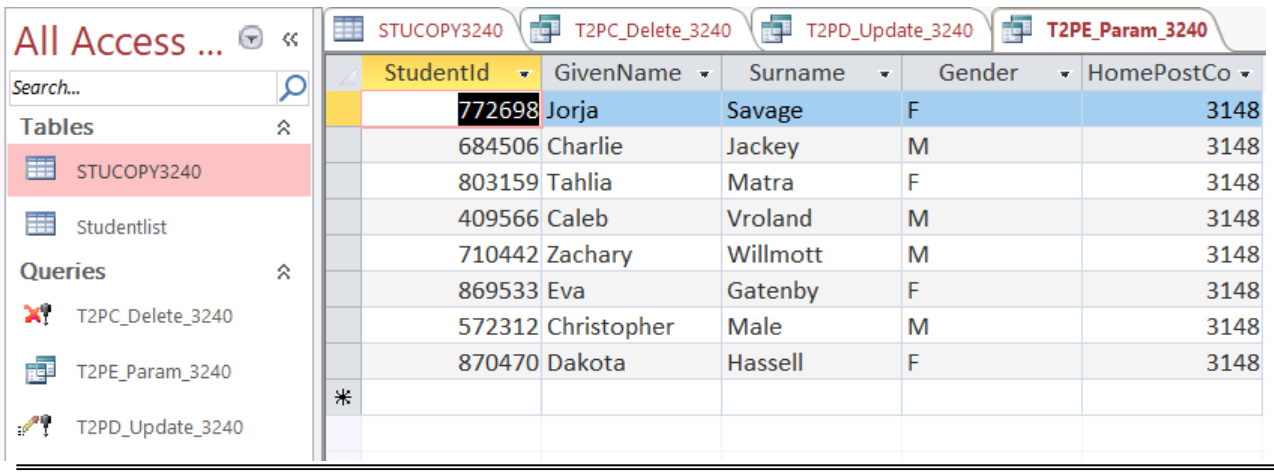
StudentId	Gender	GivenName	Surname	DateOfBirth	Faculty	HomePostCo	FeesDue	Click to Add
102763240	M	Khalid	Baig	4/11/2002	Faculty of Scien	12211	$2,000.00	
993207	M	Samuel	Kenyon	9/9/1997	Faculty of Healt	3056	$2,000.00	
987914	M	Sean	Tishler	12/25/1998	Faculty of Healt	3065	$2,000.00	
965653	F	Brianna	Salomons	2/21/1997	Faculty of Busin	3020		
943722	M	Lang	Jaw-Long	6/20/1998	Faculty of Scien	3053	$2,000.00	
935171	M	Max	Permewan	3/26/1996	Faculty of Busin	3064	$2,000.00	
934378	F	Indiana	McDonagh	1/9/1999	Faculty of Healt	3032		
924210	M	Nicholas	Thorn	8/28/1996	Faculty of Busin	3053	$2,000.00	
894264	M	Dominic	Muskett	1/19/1998	Faculty of Healt	3040	$2,000.00	
884570	M	George	Yirawala	4/24/1996	Faculty of Scien	3058	$2,000.00	
870470	F	Dakota	Hassell	9/15/1996	Faculty of Scien	3148		
869533	F	Eva	Gatenby	7/8/1999	Faculty of Scien	3148		

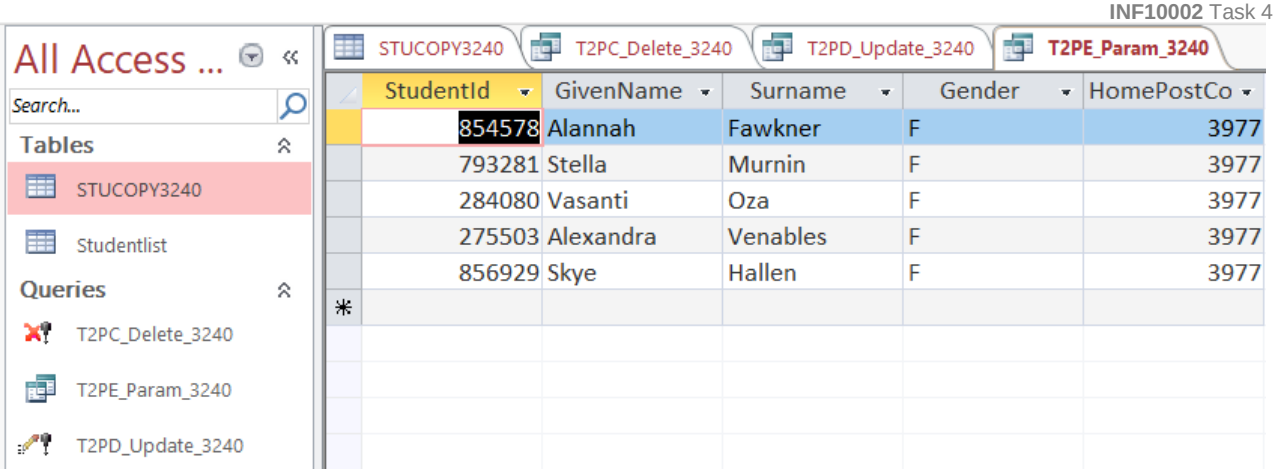
Pass 2e

Paste your screen capture(s) for this task here.



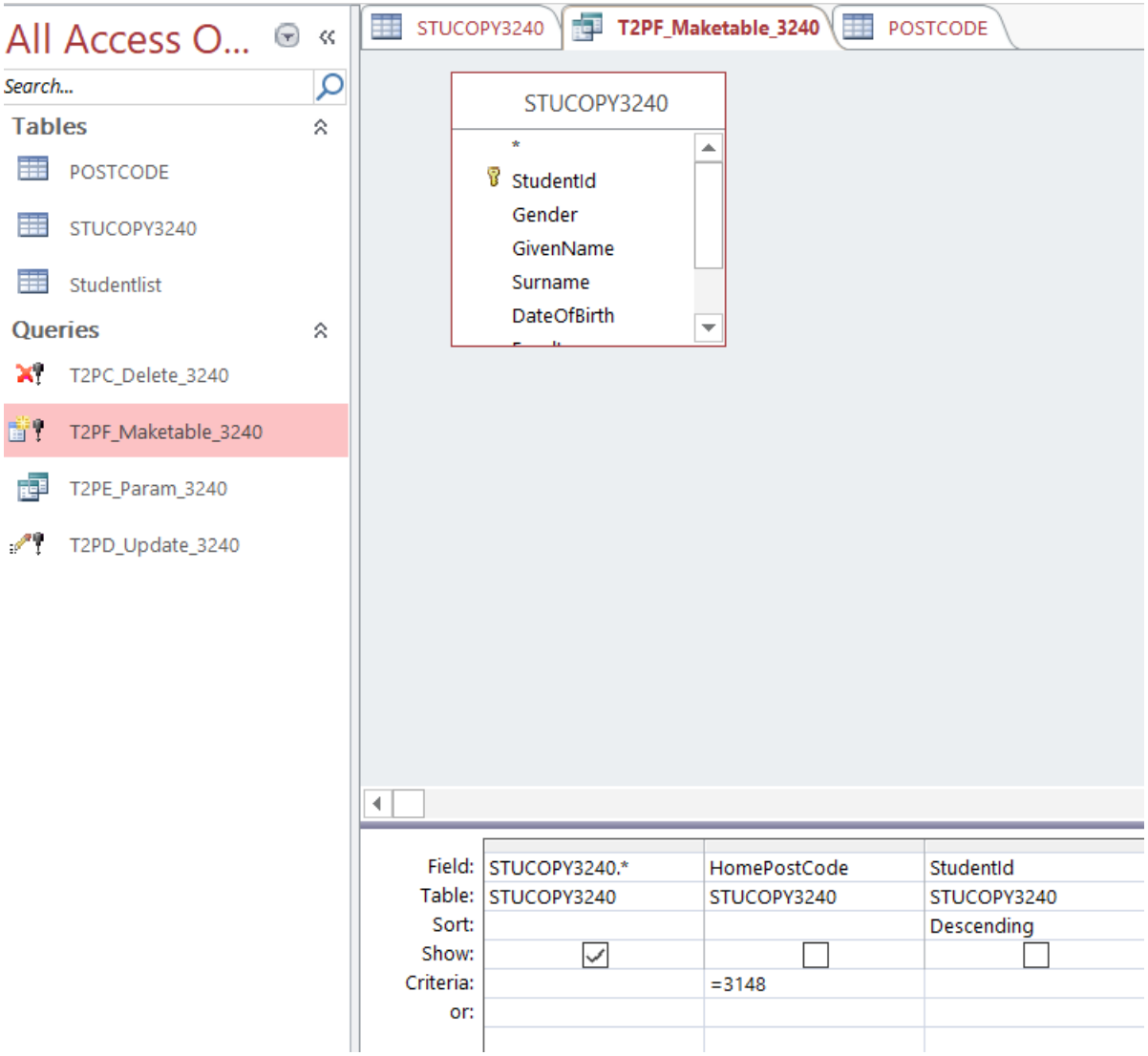


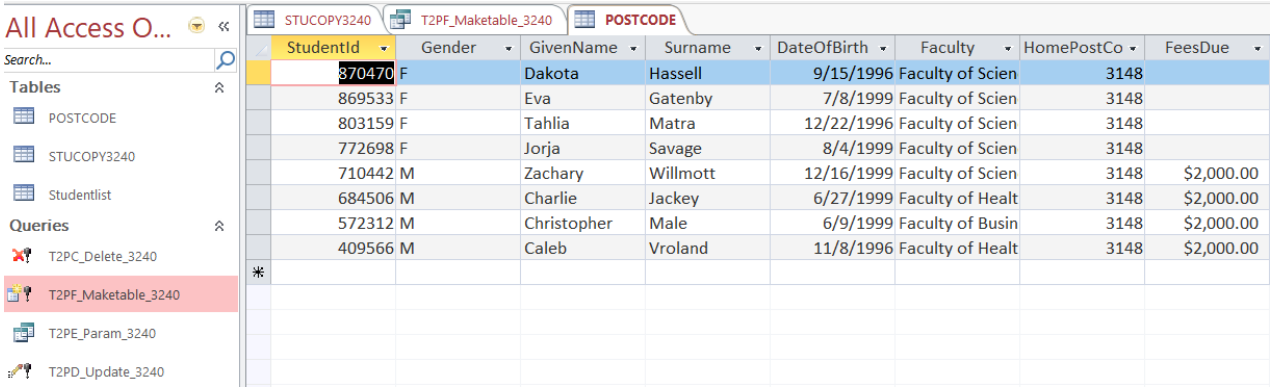




Pass 2f

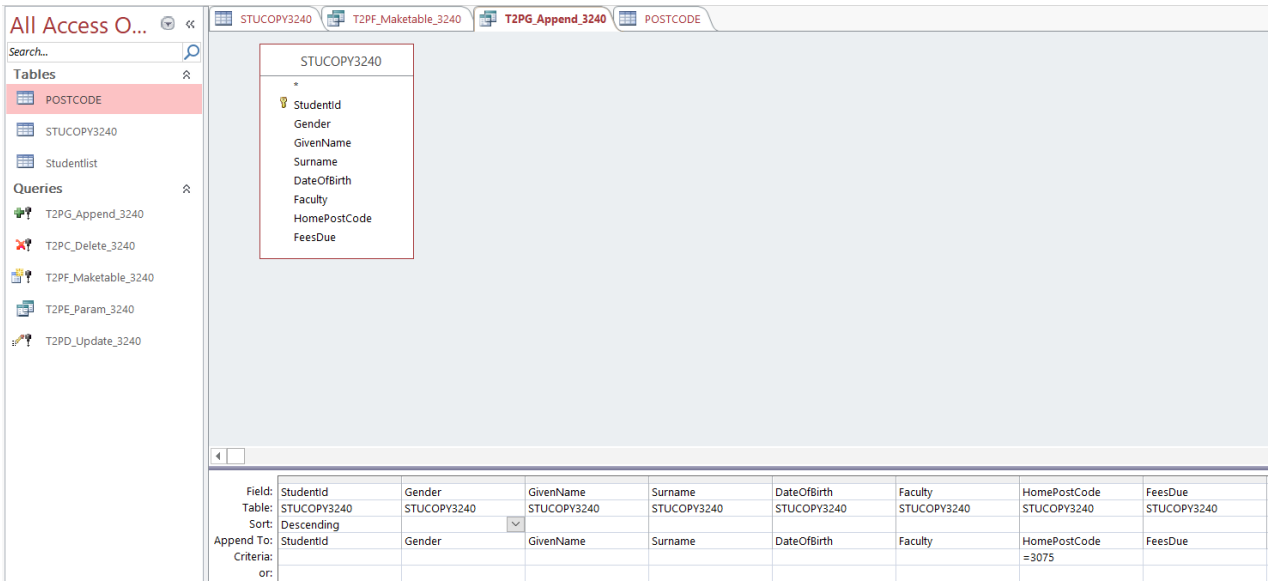
Paste your screen capture(s) for this task here.

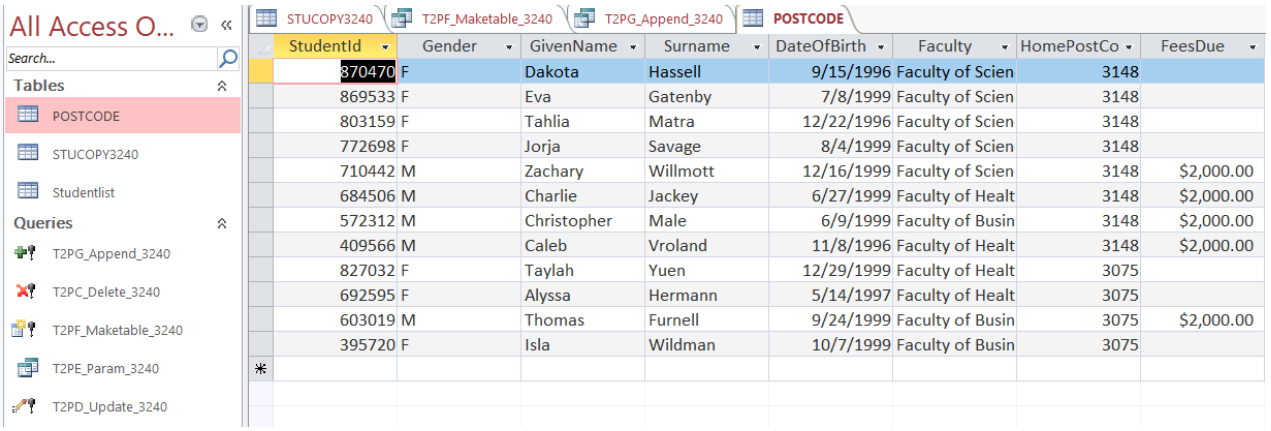




Pass 2g

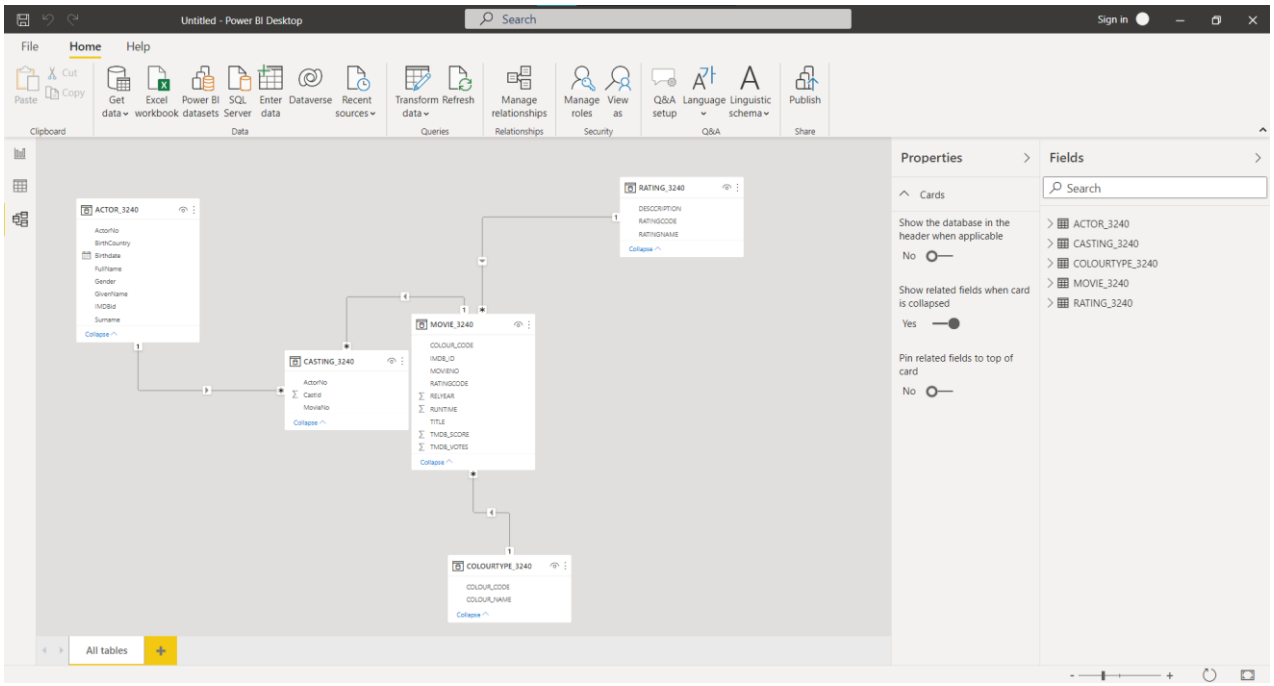
Paste your screen capture(s) for this task here.





Pass 2h

Paste your screen capture(s) for this task here.



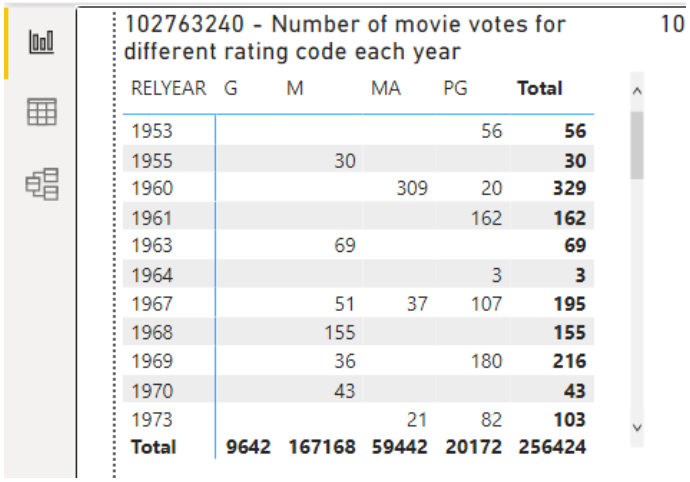
Pass 2i

Paste your screen capture(s) for this task here.

TITLE	RELYEAR	TMDB_SCORE
Batman Forever	1995	5.30
Batman v Superman: Dawn of Justice	2016	5.60
Bewitched	2005	5.10
Charlie's Angels	2000	5.30
Charlie's Angels: Full Throttle	2003	5.60
Dark Shadows	2012	5.50
Die Another Day	2002	5.70
Evan Almighty	2007	5.40
Evita	1996	5.70
Happy Feet	2006	5.60
Lost in Space	1998	5.20
Mike & Dave Need Wedding Dates	2016	5.70

Pass 2j

Paste your screen capture(s) for this task here.

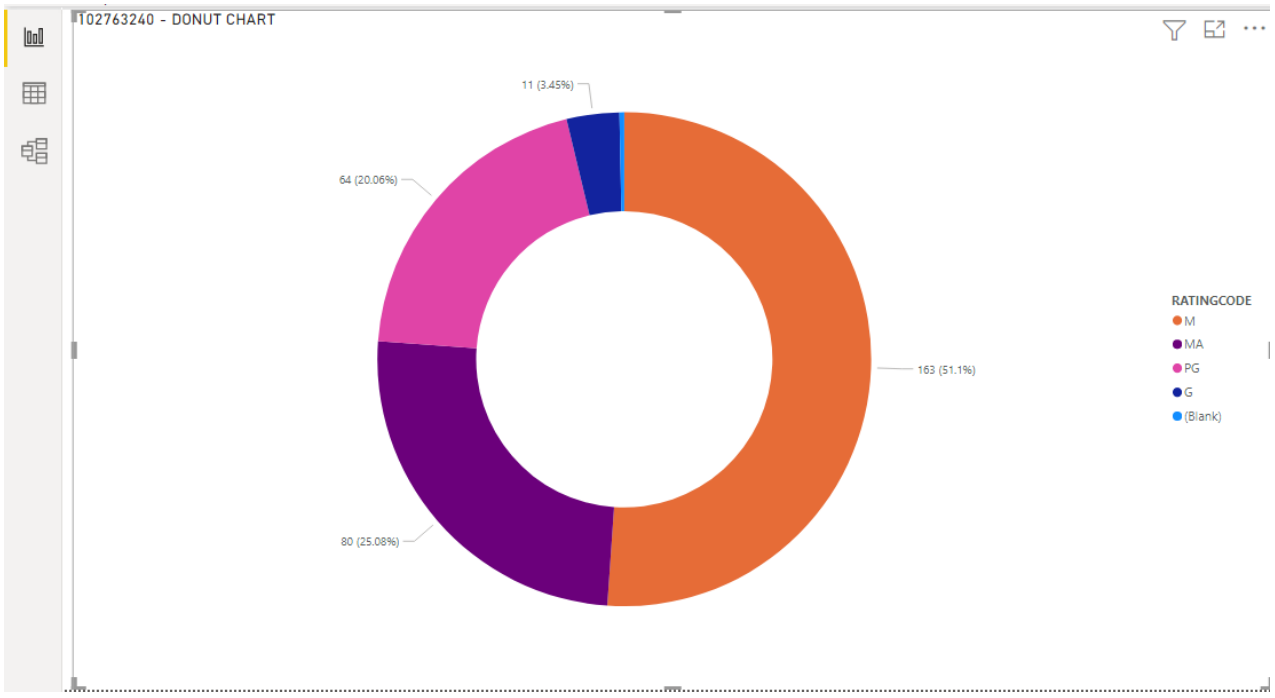


102763240 - Number of movie votes for different rating code each year 10

RELYEAR	G	M	MA	PG	Total
1953				56	**56**
1955		30			**30**
1960			309	20	**329**
1961				162	**162**
1963		69			**69**
1964				3	**3**
1967		51	37	107	**195**
1968		155			**155**
1969		36		180	**216**
1970		43			**43**
1973			21	82	**103**
Total	**9642**	**167168**	**59442**	**20172**	**256424**

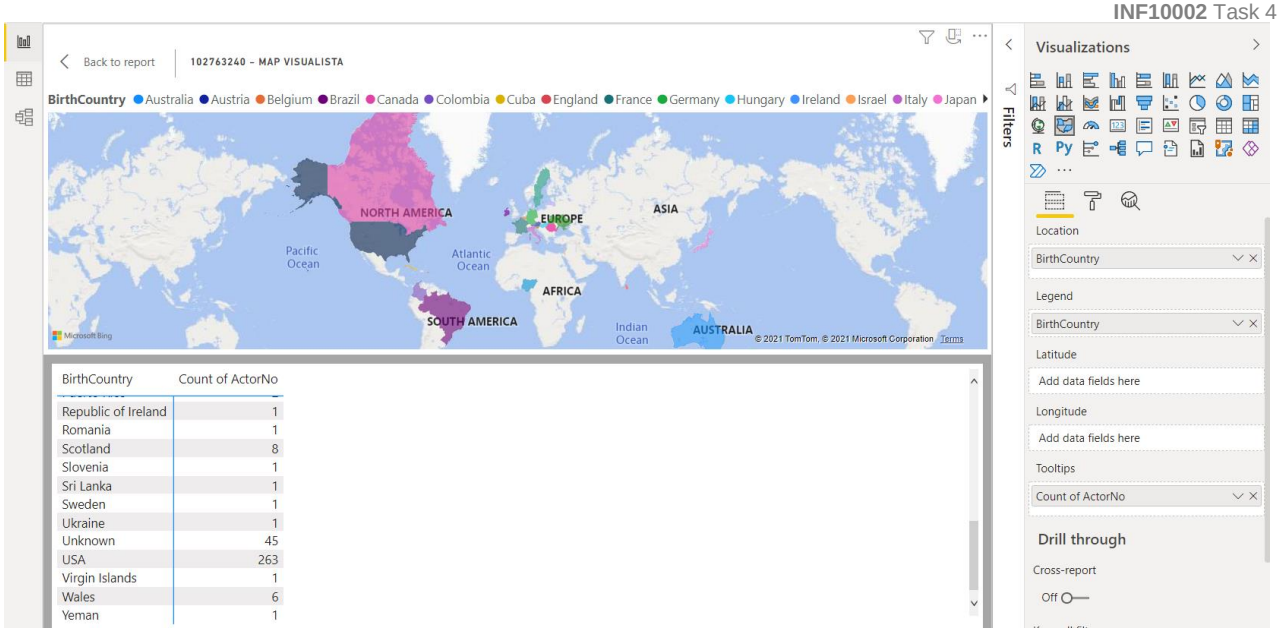
Pass 2k

Paste your screen capture(s) for this task here.



Pass 2L

Paste your screen capture(s) for this task here.

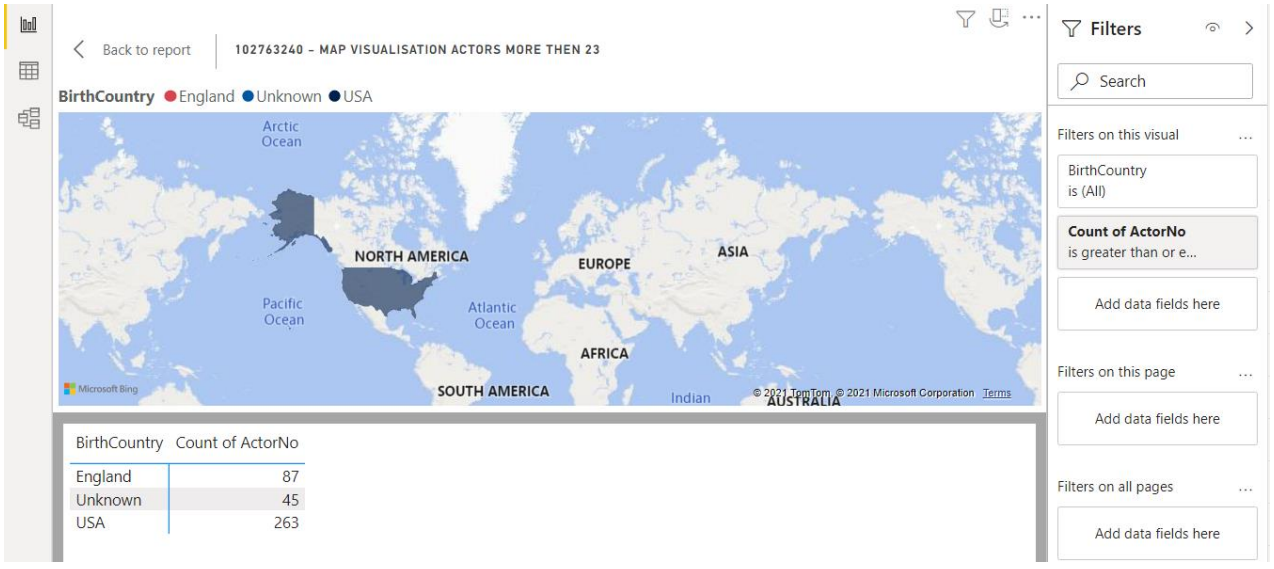


BirthCountry	Count of ActorNo
Republic of Ireland	1
Romania	1
Scotland	8
Slovenia	1
Sri Lanka	1
Sweden	1
Ukraine	1
Unknown	45
USA	263
Virgin Islands	1
Wales	6
Yeman	1

USA has the largest no. of actors

Pass 2M

Paste your screen capture(s) for this task here.



BirthCountry	Count of ActorNo
England	87
Unknown	45
USA	263

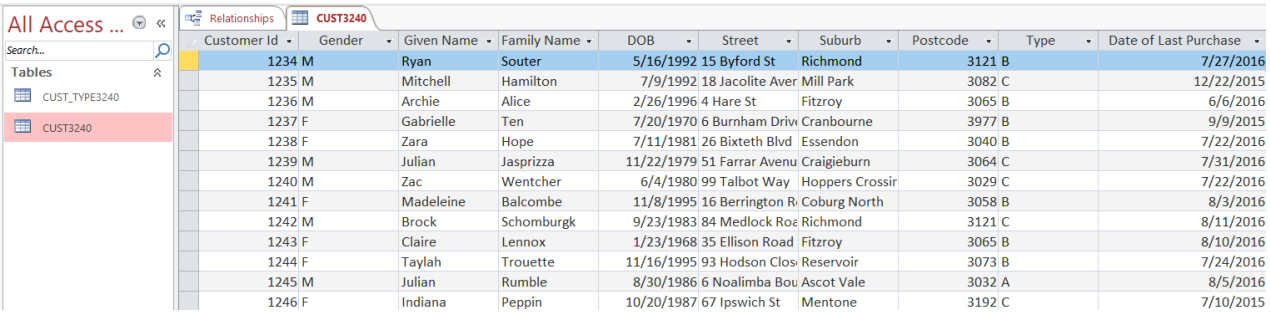
Database Analysis & Design
INF10002

Task 2 – Credit Submission

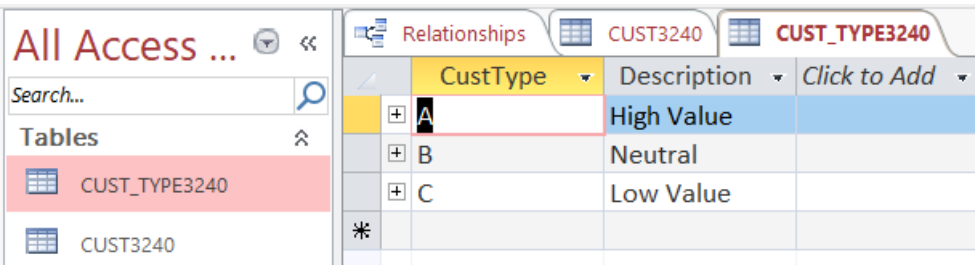
Student Number: 102763240
Student Name: Khalid Yaseen

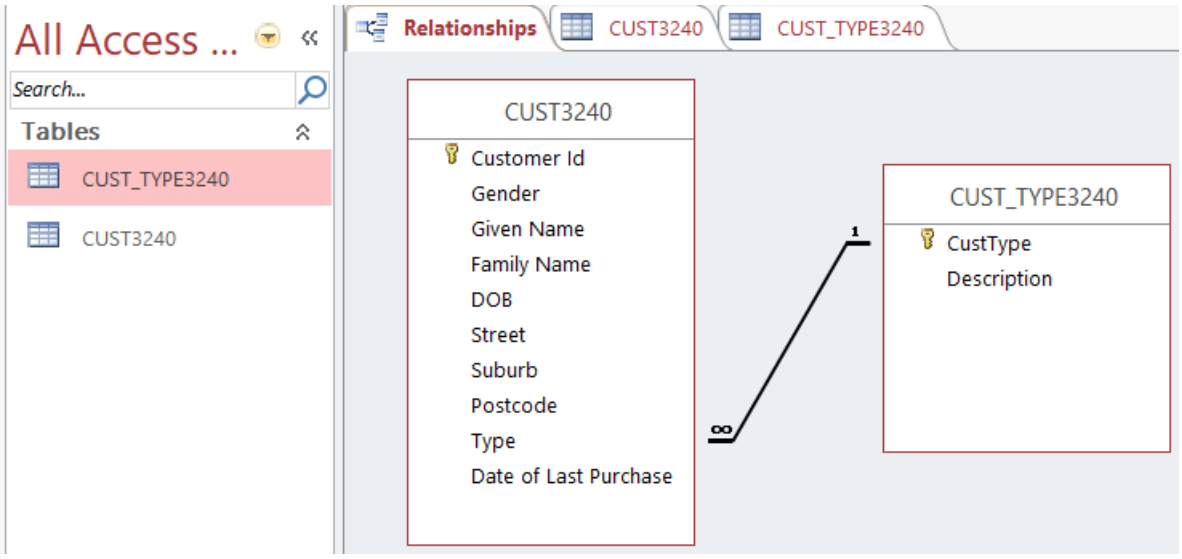
Credit 2a

Paste your screen capture(s) for this task here.



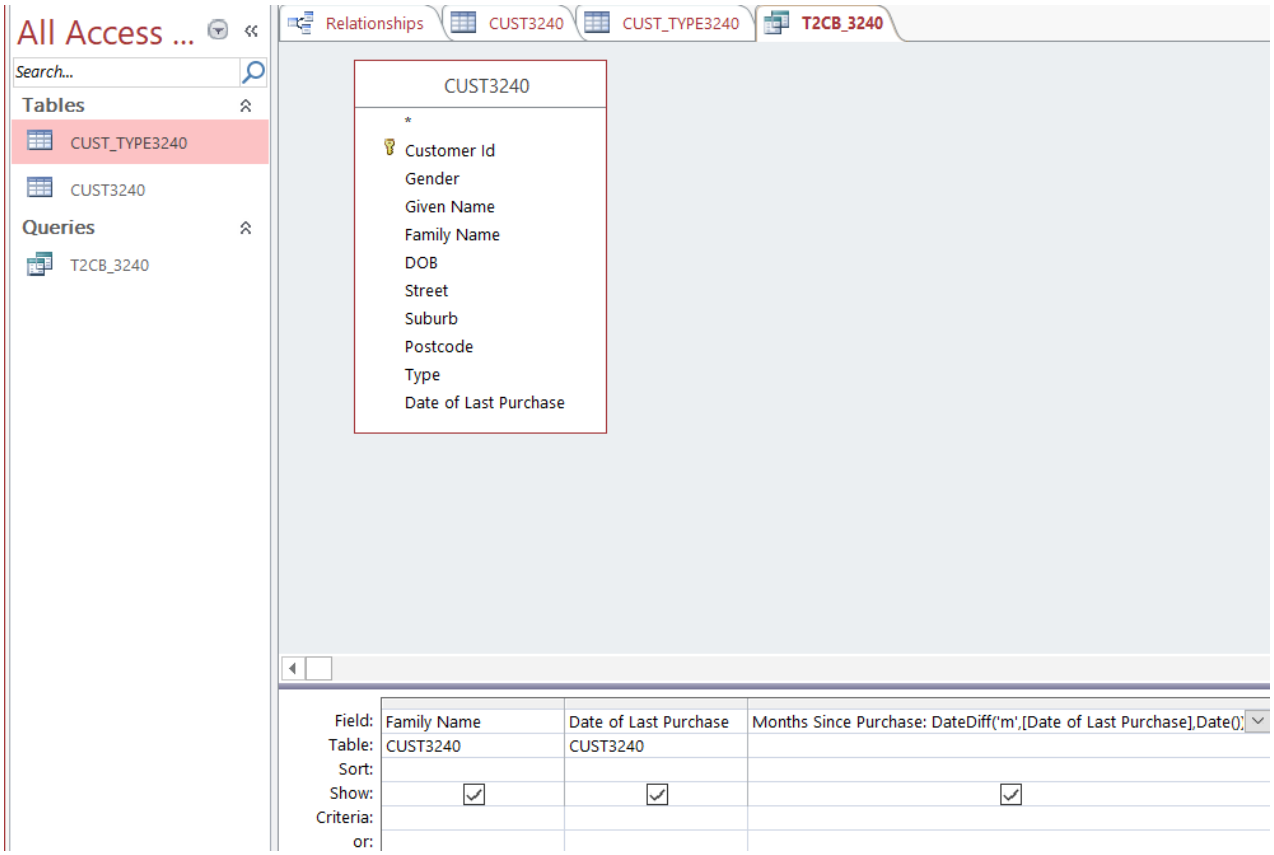
Customer Id	Gender	Given Name	Family Name	DOB	Street	Suburb	Postcode	Type	Date of Last Purchase
1234	M	Ryan	Souter	5/16/1992	15 Byford St	Richmond	3121	B	7/27/2016
1235	M	Mitchell	Hamilton	7/9/1992	18 Jacolite Aver	Mill Park	3082	C	12/22/2015
1236	M	Archie	Alice	2/26/1996	4 Hare St	Fitzroy	3065	B	6/6/2016
1237	F	Gabrielle	Ten	7/20/1970	6 Burnham Driv	Cranbourne	3977	B	9/9/2015
1238	F	Zara	Hope	7/11/1981	26 Bixteth Blvd	Essendon	3040	B	7/22/2016
1239	M	Julian	Jasprizza	11/22/1979	51 Farrar Avenu	Craigieburn	3064	C	7/31/2016
1240	M	Zac	Wentcher	6/4/1980	99 Talbot Way	Hoppers Crossir	3029	C	7/22/2016
1241	F	Madeleine	Balcombe	11/8/1995	16 Berrington R	Coburg North	3058	B	8/3/2016
1242	M	Brock	Schomburgk	9/23/1983	84 Medlock Roa	Richmond	3121	C	8/11/2016
1243	F	Claire	Lennox	1/23/1968	35 Ellison Road	Fitzroy	3065	B	8/10/2016
1244	F	Taylah	Trouette	11/16/1995	93 Hodson Clos	Reservoir	3073	B	7/24/2016
1245	M	Julian	Rumble	8/30/1986	6 Noalimba Bou	Ascot Vale	3032	A	8/5/2016
1246	F	Indiana	Peppin	10/20/1987	67 Ipswich St	Mentone	3192	C	7/10/2015

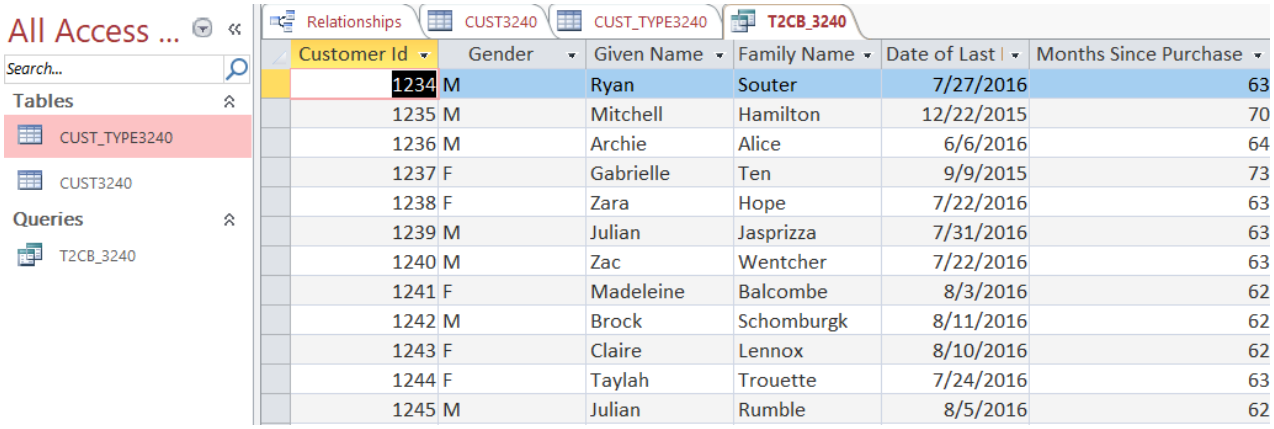




Credit 2b

Paste your screen capture(s) for this task here.

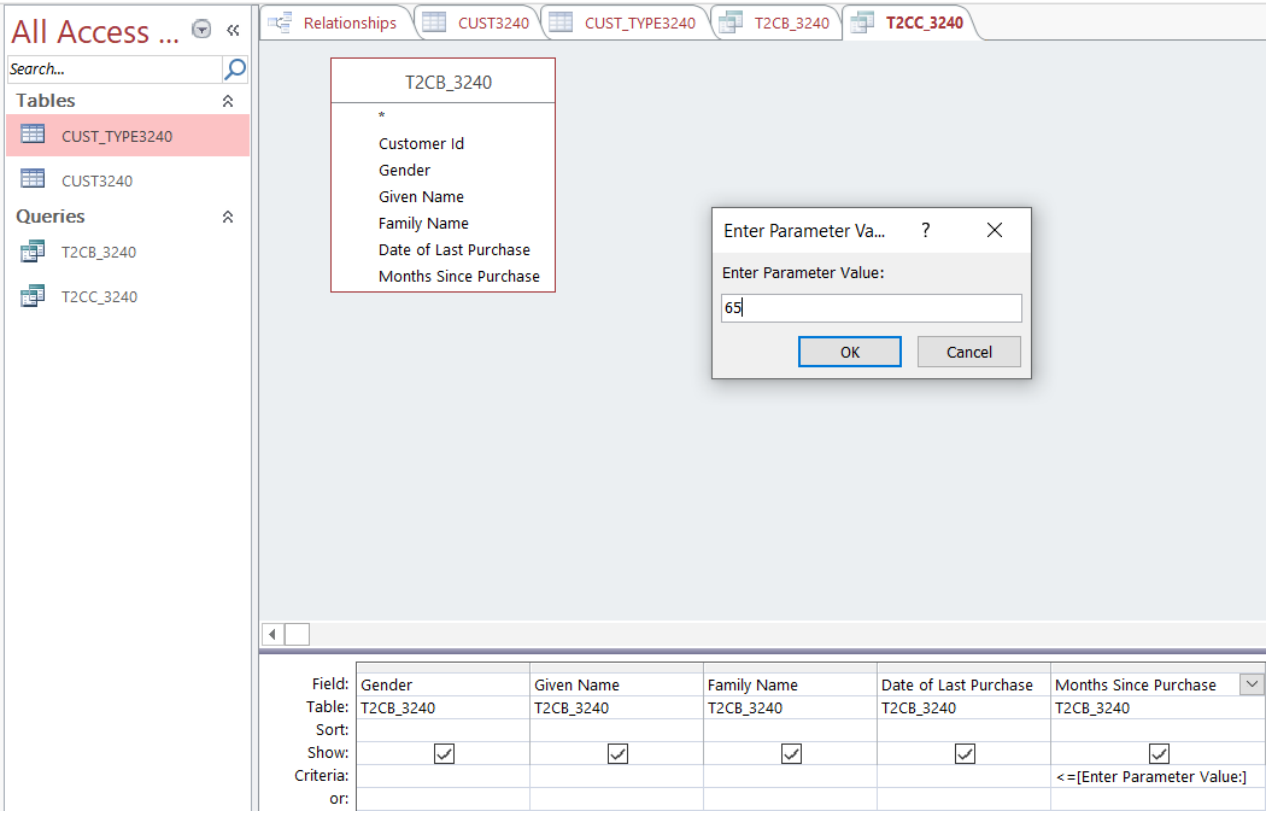


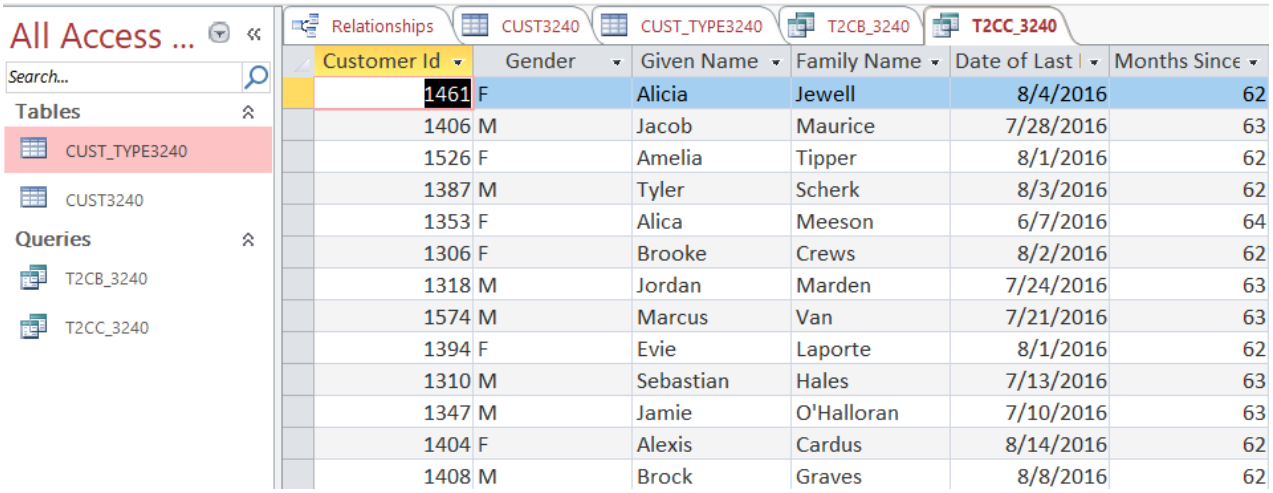


Customer Id	Gender	Given Name	Family Name	Date of Last	Months Since Purchase
1234	M	Ryan	Souter	7/27/2016	63
1235	M	Mitchell	Hamilton	12/22/2015	70
1236	M	Archie	Alice	6/6/2016	64
1237	F	Gabrielle	Ten	9/9/2015	73
1238	F	Zara	Hope	7/22/2016	63
1239	M	Julian	Jasprizza	7/31/2016	63
1240	M	Zac	Wentcher	7/22/2016	63
1241	F	Madeleine	Balcombe	8/3/2016	62
1242	M	Brock	Schomburgk	8/11/2016	62
1243	F	Claire	Lennox	8/10/2016	62
1244	F	Taylah	Trouette	7/24/2016	63
1245	M	Julian	Rumble	8/5/2016	62

Credit 2c

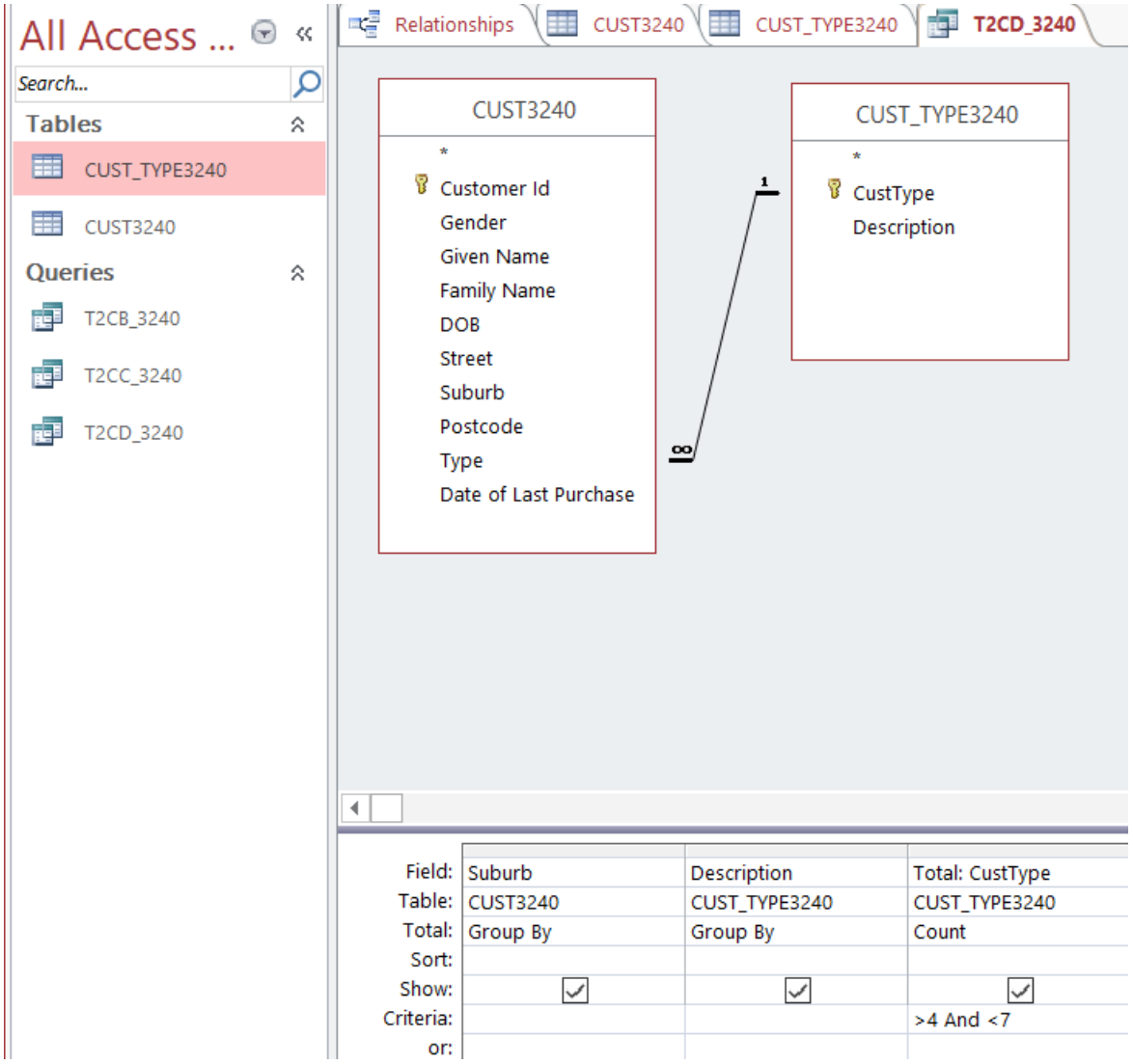
Paste your screen capture(s) for this task here.

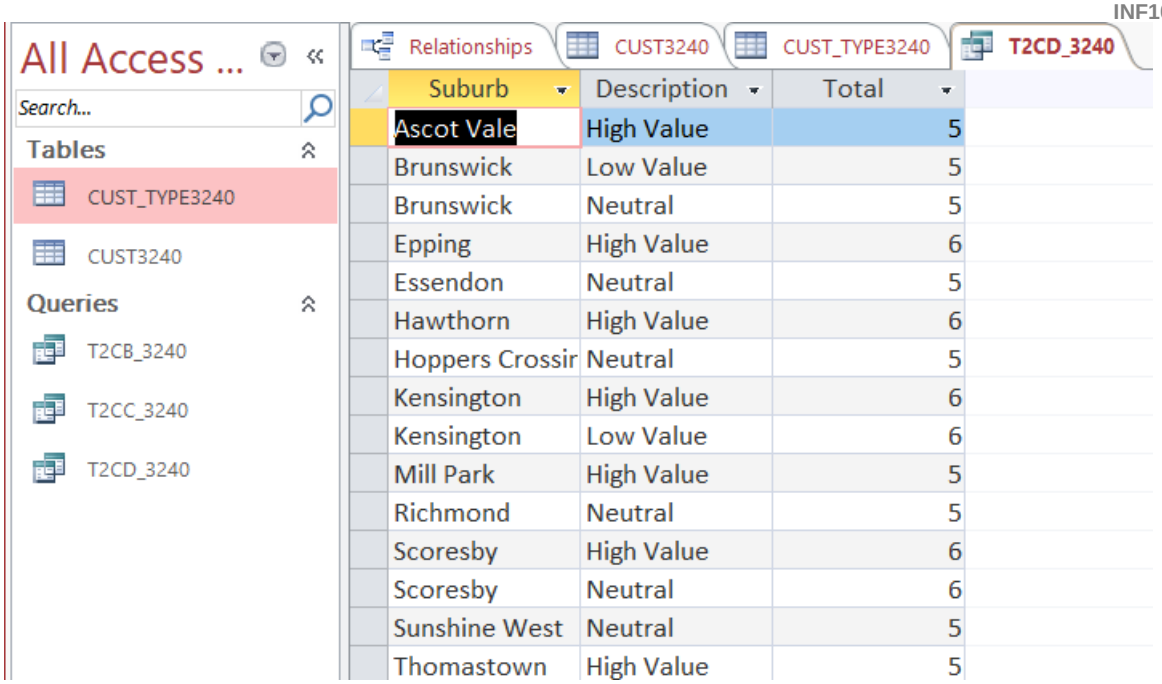




Credit 2d

Paste your screen capture(s) for this task here.





Suburb	Description	Total
Ascot Vale	High Value	5
Brunswick	Low Value	5
Brunswick	Neutral	5
Epping	High Value	6
Essendon	Neutral	5
Hawthorn	High Value	6
Hoppers Crossir	Neutral	5
Kensington	High Value	6
Kensington	Low Value	6
Mill Park	High Value	5
Richmond	Neutral	5
Scoresby	High Value	6
Scoresby	Neutral	6
Sunshine West	Neutral	5
Thomastown	High Value	5

Credit 2e

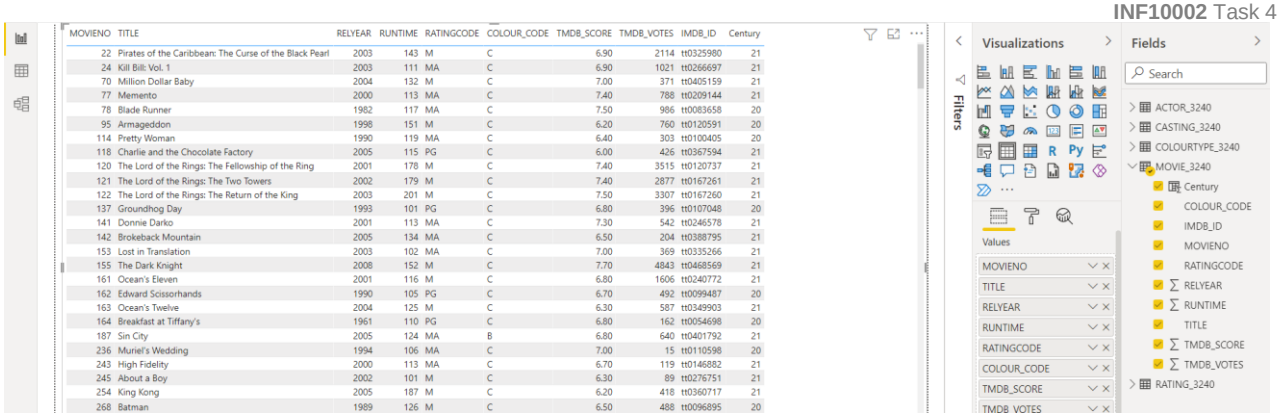
Paste your screen capture(s) for this task here.

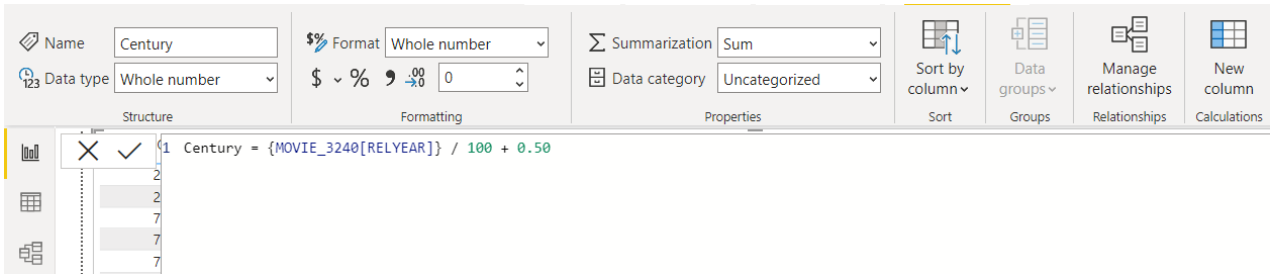
T2CD_3240.txt

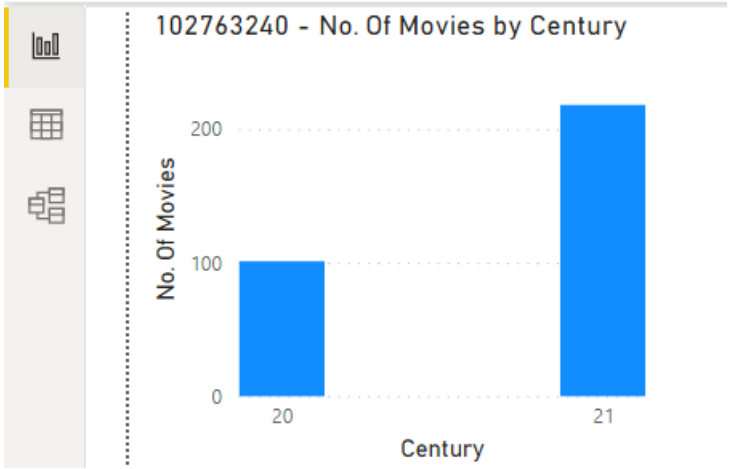
```
'Suburb';'Description';'Total'
'Ascot Vale';'High Value';5
'Brunswick';'Low Value';5
'Brunswick';'Neutral';5
'Epping';'High Value';6
'Essendon';'Neutral';5
'Hawthorn';'High Value';6
'Hoppers Crossing';'Neutral';5
'Kensington';'High Value';6
'Kensington';'Low Value';6
'Mill Park';'High Value';5
'Richmond';'Neutral';5
'Scoresby';'High Value';6
'Scoresby';'Neutral';6
'Sunshine West';'Neutral';5
'Thomastown';'High Value';5
```

Credit 2f

Paste your screen capture(s) for this task here.

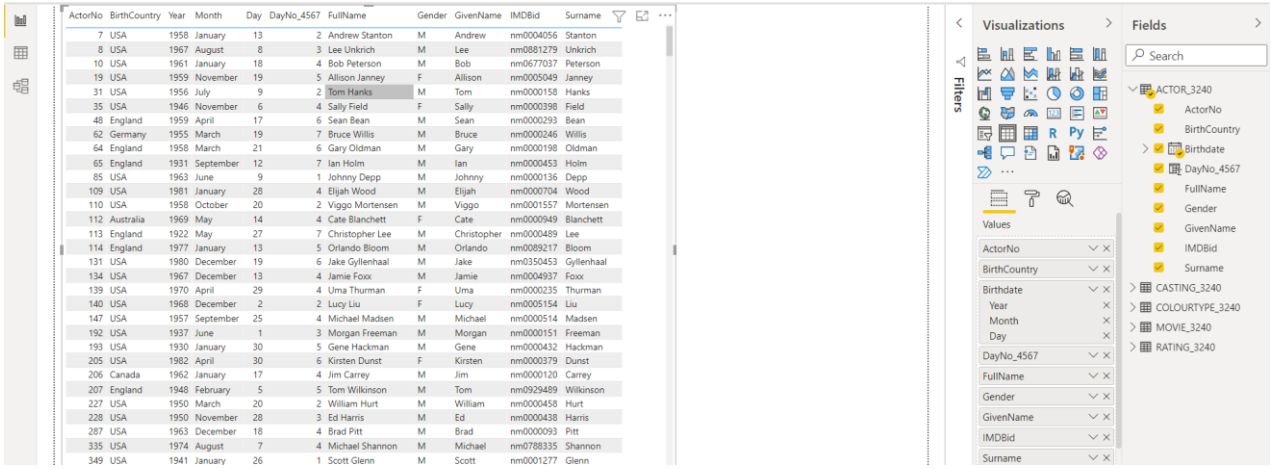


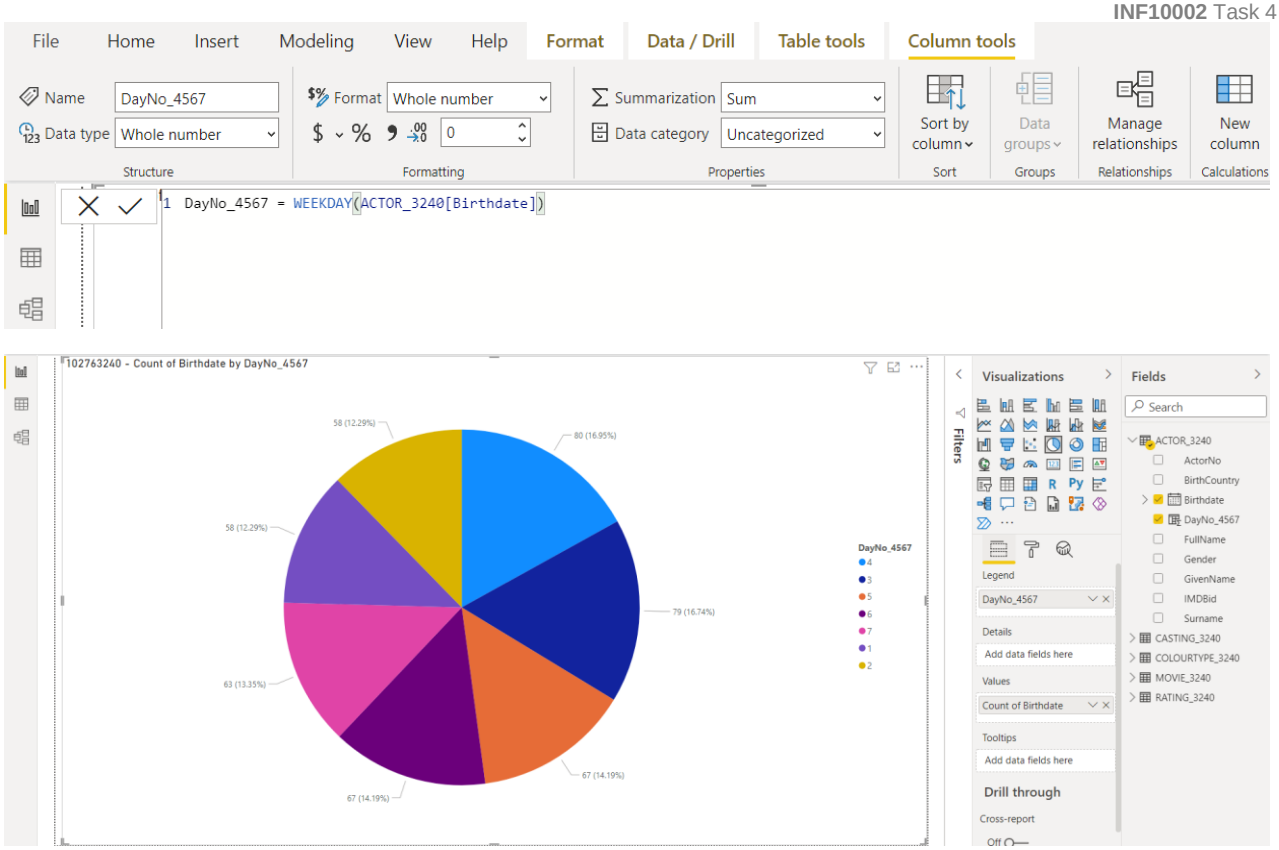




Credit 2g

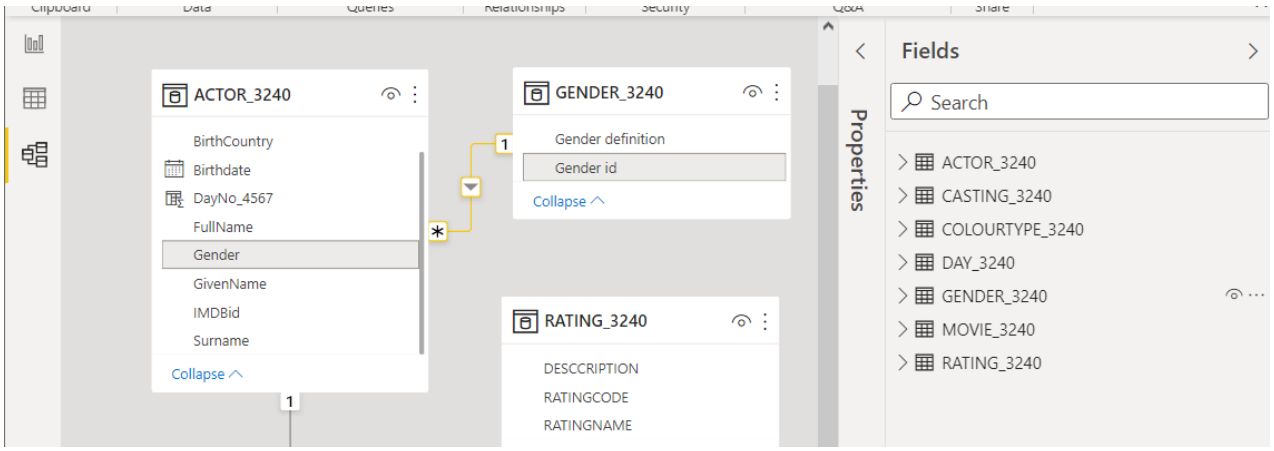
Paste your screen capture(s) for this task here.





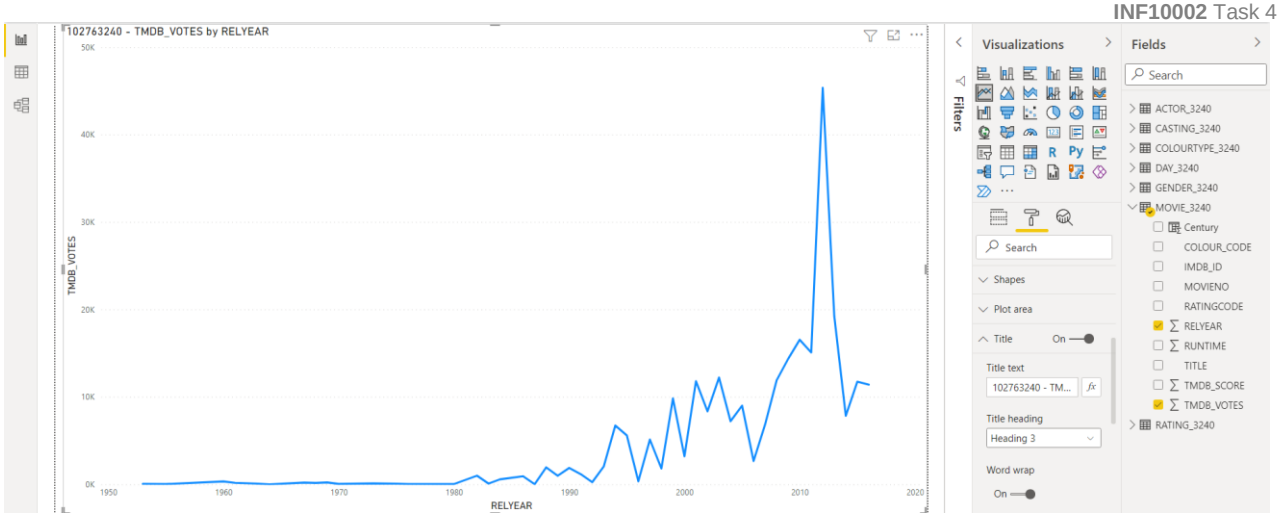
Credit 2h

Paste your screen capture(s) for this task here.



Credit 2i

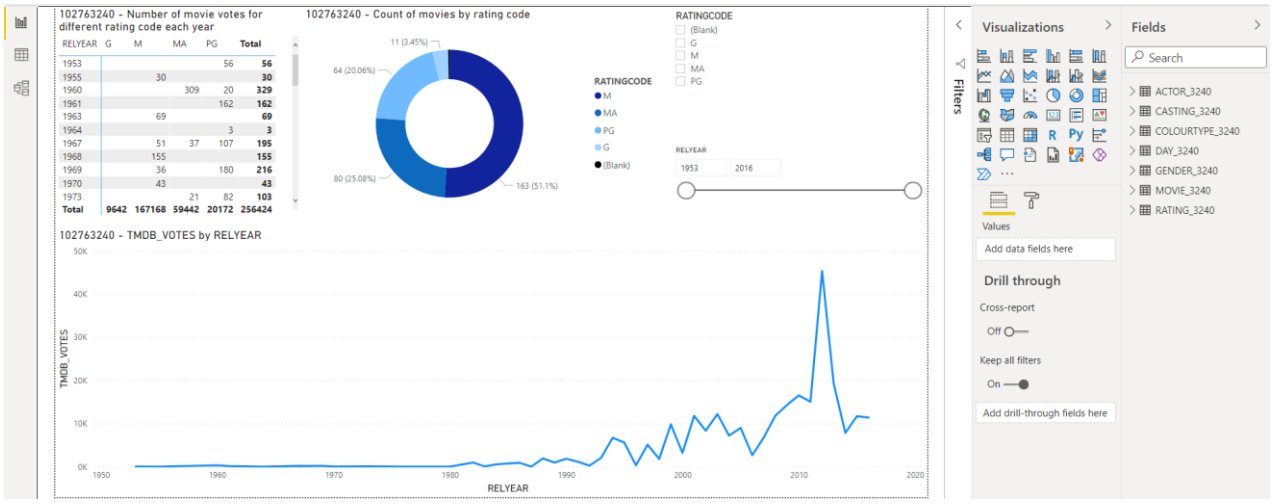
Paste your screen capture(s) for this task here.



The number of votes stay minimal from 1950's until 1980's, then they see a mix match of growth and downfall from 1980s throughout 2000s. Then there is a sudden growth in the 2010's amounting to almost 50K from a mere 20K which later on sees a sudden downfall in the mid of 2010-2020 returning to a mere 10-20K.

Credit 2j

Paste your screen capture(s) for this task here.



- Between 1962 and 1980, 1968 received the most votes for movies with classification code M, the total votes amounted to 155 in that year.
- The total numbers of movies released between the year 1988 and 1994 with classification code MA, amounted to 14.

Database Analysis & Design
INF10002

Task 3 – Pass Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Pass 3a

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, TITLE
FROM MOVIE3240;

SELECT '102763240' as STUID, TITLE, MOVIENO, TITLE, RELYEAR, COLOUR_CODE
FROM MOVIE3240
ORDER BY RELYEAR desc;
```

STUID	TITLE	MOVIENO	TITLE	RELYEAR	C
102763240	Jason Bourne	324668	Jason Bourne	2016	C
102763240	Batman v Superman: Dawn of Justice	209112	Batman v Superman: Dawn of Justice	2016	C
102763240	Deadpool	293660	Deadpool	2016	C
102763240	Alice Through the Looking Glass	241259	Alice Through the Looking Glass	2016	C
102763240	Captain America: Civil War	271110	Captain America: Civil War	2016	C
102763240	Mike and Dave Need Wedding Dates	316023	Mike and Dave Need Wedding Dates	2016	C
102763240	Finding Dory	127380	Finding Dory	2016	C
102763240	Zoolander 2	329833	Zoolander 2	2016	C
102763240	Special Correspondents	355008	Special Correspondents	2016	C
102763240	The Nice Guys	290250	The Nice Guys	2016	C
102763240	Ghostbusters	43074	Ghostbusters	2016	C

STUID	TITLE	MOVIENO	TITLE	RELYEAR	C
102763240	Dior and I	261860	Dior and I	2015	C
102763240	The Intern	257211	The Intern	2015	C
102763240	Minions	211672	Minions	2015	C
102763240	The Martian	286217	The Martian	2015	C
102763240	Trainwreck	271718	Trainwreck	2015	C
102763240	Spectre	206647	Spectre	2015	C
102763240	The Man from U.N.C.L.E.	203801	The Man from U.N.C.L.E.	2015	C
102763240	The Hunger Games: Mockingjay - Part 2	131634	The Hunger Games: Mockingjay - Part 2	2015	C
102763240	The Grand Budapest Hotel	120467	The Grand Budapest Hotel	2014	C
102763240	Boyhood	85350	Boyhood	2014	C
102763240	The Amazing Spider-Man 2	102382	The Amazing Spider-Man 2	2014	C

STUID	TITLE	MOVIENO	TITLE	RELYEAR	C
102763240	Transformers: Age of Extinction	91314	Transformers: Age of Extinction	2014	C
102763240	Captain America: The Winter Soldier	100402	Captain America: The Winter Soldier	2014	C
102763240	X-Men: Days of Future Past	127585	X-Men: Days of Future Past	2014	C
102763240	Tammy	226486	Tammy	2014	C
102763240	The Monuments Men	152760	The Monuments Men	2014	C
102763240	The Hunger Games: Mockingjay - Part 1	131631	The Hunger Games: Mockingjay - Part 1	2014	C
102763240	Noah	86834	Noah	2014	C
102763240	Interstellar	157336	Interstellar	2014	C
102763240	Chef	212778	Chef	2014	C
102763240	Nightcrawler	242582	Nightcrawler	2014	C
102763240	Dallas Buyers Club	152532	Dallas Buyers Club	2013	C

Pass 3b

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, TITLE, RELYEAR, RATINGCODE
FROM MOVIE3240
WHERE RATINGCODE='PG'
ORDER BY TITLE asc, RELYEAR desc;
```

```
STUID     TITLE                                                                                                RELYEAR RA
--------- ---------------------------------------------------------------------------------------------------- ---------- --
102763240 A League of Their Own                                                                                      1992 PG
102763240 Alice Through the Looking Glass                                                                            2016 PG
102763240 Apollo 13                                                                                                  1995 PG
102763240 Breakfast at Tiffany's                                                                                     1961 PG
102763240 Butch Cassidy and the Sundance Kid                                                                         1969 PG
102763240 Catwoman                                                                                                   2004 PG
102763240 Charlie and the Chocolate Factory                                                                          2005 PG
102763240 Charlie's Angels                                                                                           2000 PG
102763240 Charlie's Angels: Full Throttle                                                                            2003 PG
102763240 Confessions of a Teenage Drama Queen                                                                       2004 PG
102763240 Dirty Rotten Scoundrels                                                                                    1988 PG

STUID     TITLE                                                                                                RELYEAR RA
--------- ---------------------------------------------------------------------------------------------------- ---------- --
102763240 DodgeBall: A True Underdog Story                                                                           2004 PG
102763240 Driving Miss Daisy                                                                                         1989 PG
102763240 Dumb and Dumber                                                                                            1994 PG
102763240 Edward Scissorhands                                                                                        1990 PG
102763240 Envy                                                                                                       2004 PG
102763240 Evan Almighty                                                                                              2007 PG
102763240 Evita                                                                                                      1996 PG
102763240 Ferris Bueller's Day Off                                                                                   1986 PG
102763240 Freaky Friday                                                                                              2003 PG
102763240 Fried Green Tomatoes                                                                                       1991 PG
102763240 Fun With Dick and Jane                                                                                     2005 PG
```

Pass 3c

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, MOVIENO, TITLE, TMDB_VOTES
FROM MOVIE3240
WHERE TITLE like 'Deadpool' or TITLE like 'Hamlet'
ORDER BY TITLE asc, TMDB_VOTES desc;
```

Script Output

Task completed in 1.027 seconds

```
64 rows selected.


STUID       MOVIENO TITLE                                                                                        TMDB_VOTES
--------- ---------- ---------------------------------------------------------------------------------------------------- ----------
102763240     293660 Deadpool                                                                                           4387
102763240      10549 Hamlet                                                                                               15
102763240      10264 Hamlet                                                                                                9
102763240      10688 Hamlet                                                                                                1
```

Pass 3d

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, MOVIENO, TITLE, RELYEAR, RUNTIME, RATINGCODE, COLOUR_CODE, TMDB_SCORE, TMDB_VOTES, TMDB_ID
FROM MOVIE3240
WHERE TMDB_VOTES <=2000 and(RELYEAR =2009 or RELYEAR =2008)
ORDER BY TMDB_VOTES desc;
```

Script Output | Task completed in 1.122 seconds

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	767	Harry Potter and the Half-Blood Prince	2009	153	M	C	6.8	1499	tt0417741
102763240	9502	Kung Fu Panda	2008	90	PG	C	6.5	945	tt0441773
102763240	19908	Zombieland	2009	88	MA	C	7	878	tt1156398
102763240	8966	Twilight	2008	122	M	C	5.5	850	tt1099212
102763240	534	Terminator Salvation	2009	115	M	C	5.8	782	tt0438488
102763240	65754	The Girl with the Dragon Tattoo	2009	158	MA	C	6.6	678	tt1568346
102763240	10764	Quantam of Solace	2008	106	M	C	6	531	tt0830515
102763240	7446	Tropic Thunder	2008	107	MA	C	6.2	273	tt0942385
102763240	11665	Get Smart	2008	110	PG	C	5.8	228	tt0425061
102763240	4944	Burn After Reading	2008	96	MA	C	6.3	226	tt0887883
102763240	11631	Mamma Mia!	2008	108	M	C	5.9	211	tt0795421

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	7980	The Lovely Bones	2009	135	M	C	6.2	150	tt0380510
102763240	16614	Adventureland	2009	107	M	C	6.2	104	tt1091722
102763240	23082	The Invention of Lying	2009	100	M	C	5.9	92	tt1058017
102763240	8952	I Love You Phillip Morris	2009	98	MA	C	6.1	75	tt1045772

15 rows selected.

Pass 3e

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, MOVIENO, TITLE, RELYEAR, RUNTIME, RATINGCODE, COLOUR_CODE, TMDB_SCORE, TMDB_VOTES, TMDB_ID
FROM MOVIE3240
WHERE RUNTIME in (124, 118, 120)
ORDER BY TITLE;
```

Script Output | Task completed in 1.076 seconds

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	241259	Alice Through the Looking Glass	2016	118	PG	C	6.6	283	tt2567026
102763240	68734	Argo	2012	120	M	C	6.7	1473	tt1024648
102763240	1771	Captain America: The First Avenger	2011	124	M	C	6.2	2815	tt0458339
102763240	50646	Crazy, Stupid, Love.	2011	118	M	C	6.6	548	tt1570728
102763240	1573	Die Hard 2	1990	124	M	C	6.3	699	tt0099423
102763240	10138	Iron Man 2	2010	124	M	C	6.5	3033	tt1228705
102763240	10648	Magnum Force	1973	124	MA	C	7.1	21	tt0070355
102763240	787	Mr. and Mrs. Smith	2005	120	M	C	6.3	524	tt0356910
102763240	62838	New Year's Eve	2011	118	M	C	5.5	115	tt1598822
102763240	509	Notting Hill	1999	124	M	C	6.3	162	tt0125439
102763240	1552	Parenthood	1989	124	M	C	6.9	21	tt0098067

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	804	Roman Holiday	1953	118	PG	B	7.8	56	tt0046250
102763240	187	Sin City	2005	124	MA	B	6.8	640	tt0401792
102763240	9481	The Bone Collector	1999	118	MA	C	6.2	111	tt0145681
102763240	49040	The Bourne Legacy	2012	120	M	C	5.8	1361	tt1194173
102763240	152760	The Monuments Men	2014	118	M	C	6.2	199	tt2177771
102763240	564	The Mummy	1999	124	M	C	6	783	tt0120616
102763240	274	The Silence of the Lambs	1991	118	MA	C	7.4	1002	tt0102926
102763240	37799	The Social Network	2010	120	M	C	6.8	832	tt1285016
102763240	74465	We Bought a Zoo	2011	124	PG	C	6.2	179	tt1389137

20 rows selected.

Pass 3f

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, MOVIENO, TITLE, RELYEAR
FROM MOVIE3240
WHERE LOWER(TITLE) like '%ame%' or LOWER(TITLE) like '%our%'
ORDER BY MOVIENO DESC;
```

Query Result × Script Output ×

Task completed in 0.034 seconds

STUID	MOVIENO	TITLE	RELYEAR
102763240	324668	Jason Bourne	2016
102763240	271110	Captain America: Civil War	2016
102763240	168672	American Hustle	2013
102763240	131634	The Hunger Games: Mockingjay - Part 2	2015
102763240	131631	The Hunger Games: Mockingjay - Part 1	2014
102763240	101299	The Hunger Games: Catching Fire	2013
102763240	100402	Captain America: The Winter Soldier	2014
102763240	70160	The Hunger Games	2012
102763240	58574	Sherlock Holmes: A Game of Shadows	2011
102763240	49051	The Hobbit: An Unexpected Journey	2012
102763240	49040	The Bourne Legacy	2012

STUID	MOVIENO	TITLE	RELYEAR
102763240	31052	The Accidental Tourist	1988
102763240	2501	The Bourne Identity	2002
102763240	1771	Captain America: The First Avenger	2011
102763240	712	Four Weddings and a Funeral	1994

15 rows selected.

Pass 3g

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, MOVIENO, TITLE, RELYEAR, RUNTIME, RATINGCODE, COLOUR_CODE, TMDB_SCORE, TMDB_VOTES, TMDB_ID
FROM MOVIE3240
WHERE RELYEAR <=2000 and (RATINGCODE='PG' and RUNTIME between 120 and 150) or  RELYEAR <=2000 and (RATINGCODE= 'M' and TMDB_SCORE <=5.5)
ORDER BY RELYEAR;
```

Script Output ×

Task completed in 0.97 seconds

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	299	Ocean's Eleven	1960	127	PG	C	6.1	20	tt0054135
102763240	17696	Robin and the 7 Hoods	1964	123	PG	C	7.2	3	tt0058529
102763240	9277	The Sting	1973	129	PG	C	7.5	82	tt0070735
102763240	31052	The Accidental Tourist	1988	121	PG	C	5.9	4	tt0094606
102763240	10264	Hamlet	1990	130	PG	C	5.8	9	tt0099726
102763240	1633	Fried Green Tomatoes	1991	130	PG	C	6.9	30	tt0101921
102763240	11287	A League of Their Own	1992	128	PG	C	6.4	55	tt0104694
102763240	414	Batman Forever	1995	121	M	C	5.3	341	tt0112462
102763240	568	Apollo 13	1995	140	PG	C	6.6	375	tt0112384
102763240	8818	Evita	1996	134	PG	C	5.7	13	tt0116250
102763240	415	Batman and Robin	1997	125	M	C	4.8	272	tt0118688

STUID	MOVIENO	TITLE	RELYEAR	RUNTIME	RA	C	TMDB_SCORE	TMDB_VOTES	TMDB_ID
102763240	2157	Lost in Space	1998	130	PG	C	5.2	53	tt0120738
102763240	9824	Mystery Men	1999	121	PG	C	5.9	28	tt0132347

13 rows selected.

Pass 3h

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, M.MOVIENO, M.TITLE, M.RATINGCODE, R.longdesc
FROM MOVIE3240 M LEFT JOIN  RATINGMOVIE3240 R on M.RATINGCODE = R.ratingcode
ORDER BY M.TITLE desc;
```

_TRANSACTION

Task completed in 0.928 seconds

```
               318


STUID       MOVIENO TITLE                                                                                            RA LONGDESC
--------- ---------- ---------------------------------------------------------------------------------------------------- -- ----------------------------------------------------------------------
102763240     329833 Zoolander 2                                                                                      M  Recommended for mature audiences 15 years and over
102763240       9398 Zoolander                                                                                        M  Recommended for mature audiences 15 years and over
102763240      19908 Zombieland                                                                                       MA Persons under 15 years must be accompanied by a mature adult
102763240      11967 Young Guns                                                                                       MA Persons under 15 years must be accompanied by a mature adult
102763240       1819 You, Me and Dupree                                                                               M  Recommended for mature audiences 15 years and over
102763240     127585 X-Men: Days of Future Past                                                                       M  Recommended for mature audiences 15 years and over
102763240      36657 X-Men                                                                                            M  Recommended for mature audiences 15 years and over
102763240      72190 World War Z                                                                                      M  Recommended for mature audiences 15 years and over
102763240      44147 Wild Target                                                                                      M  Recommended for mature audiences 15 years and over
102763240      11199 Wild Hogs                                                                                        M  Recommended for mature audiences 15 years and over
102763240       3981 What Women Want                                                                                  M  Recommended for mature audiences 15 years and over

STUID       MOVIENO TITLE                                                                                            RA LONGDESC
--------- ---------- ---------------------------------------------------------------------------------------------------- -- ----------------------------------------------------------------------
102763240       9522 Wedding Crashers                                                                                 MA Persons under 15 years must be accompanied by a mature adult
102763240      74465 We Bought a Zoo                                                                                  PG Parental guidance recommended for persons under 15 years
102763240       7131 Van Helsing                                                                                      M  Recommended for mature audiences 15 years and over
102763240      32856 Valentine's Day                                                                                  M  Recommended for mature audiences 15 years and over
102763240        277 Underworld                                                                                       MA Persons under 15 years must be accompanied by a mature adult
102763240       2616 Uncle Buck                                                                                       PG Parental guidance recommended for persons under 15 years
102763240      11808 US Marshals                                                                                      M  Recommended for mature audiences 15 years and over
102763240       8966 Twilight                                                                                         M  Recommended for mature audiences 15 years and over
102763240       7446 Tropic Thunder                                                                                   MA Persons under 15 years must be accompanied by a mature adult
102763240      91314 Transformers: Age of Extinction                                                                  PG Parental guidance recommended for persons under 15 years
102763240       1858 Transformers                                                                                     M  Recommended for mature audiences 15 years and over
```

Pass 3i

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, M.TITLE, M.RELYEAR, M.RUNTIME, M.RATINGCODE, R.shortdesc
FROM MOVIE3240 M LEFT JOIN  RATINGMOVIE3240 R on M.RATINGCODE = R.ratingcode
WHERE  M.RELYEAR <=1989 and RUNTIME<110 and (M.RATINGCODE = 'PG' or M.RATINGCODE = 'MA')
ORDER BY MOVIENO;
```

Script Output

Task completed in 0.97 seconds

```
STUID     TITLE                                                                                                    RELYEAR    RUNTIME RA SHORTDESC
--------- ---------------------------------------------------------------------------------------------------- ---------- ---------- -- ------------------------------
102763240 Bull Durham                                                                                                1988        108 MA MATURE ACCOMPANIED (15+)
102763240 Driving Miss Daisy                                                                                         1989         99 PG PARENTAL GUIDANCE
102763240 Psycho                                                                                                     1960        109 MA MATURE ACCOMPANIED (15+)
102763240 Ghostbusters                                                                                               1984        107 PG PARENTAL GUIDANCE
102763240 The Fog                                                                                                    1980         89 MA MATURE ACCOMPANIED (15+)
102763240 Uncle Buck                                                                                                 1989        100 PG PARENTAL GUIDANCE
102763240 Murder by Death                                                                                            1976         94 PG PARENTAL GUIDANCE
102763240 Ferris Bueller's Day Off                                                                                   1986        103 PG PARENTAL GUIDANCE
102763240 Roxanne                                                                                                    1987        107 PG PARENTAL GUIDANCE
102763240 Young Guns                                                                                                 1988        107 MA MATURE ACCOMPANIED (15+)
102763240 The Rocky Horror Picture Show                                                                              1975        100 MA MATURE ACCOMPANIED (15+)

STUID     TITLE                                                                                                    RELYEAR    RUNTIME RA SHORTDESC
--------- ---------------------------------------------------------------------------------------------------- ---------- ---------- -- ------------------------------
102763240 The Graduate                                                                                               1967        106 PG PARENTAL GUIDANCE

12 rows selected.
```

Database Analysis & Design
INF10002

Task 3 – Credit Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Credit 3a

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, M.TITLE, M.RELYEAR, M.RATINGCODE, R.shortdesc, C.colourname
FROM MOVIE3240 M LEFT JOIN  RATINGMOVIE3240 R on M.RATINGCODE = R.ratingcode LEFT JOIN  COLOURTYPEMOVIE3240 C on C.colourcode = M.COLOUR_CODE
WHERE  M.RUNTIME<99 and M.RATINGCODE ='PG'
ORDER BY M.RELYEAR desc;
```

Script Output | Task completed in 0.952 seconds

STUID	TITLE	RELYEAR	RA	SHORTDESC	COLOURNAME
102763240	Minions	2015	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Gravity	2013	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Hotel Transylvania	2012	PG	PARENTAL GUIDANCE	Colour Movie
102763240	The Words	2012	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Kung Fu Panda	2008	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Evan Almighty	2007	PG	PARENTAL GUIDANCE	Colour Movie
102763240	The Pink Panther	2006	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Robots	2005	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Fun With Dick and Jane	2005	PG	PARENTAL GUIDANCE	Colour Movie
102763240	DodgeBall: A True Underdog Story	2004	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Confessions of a Teenage Drama Queen	2004	PG	PARENTAL GUIDANCE	Colour Movie

STUID	TITLE	RELYEAR	RA	SHORTDESC	COLOURNAME
102763240	Johnny English	2003	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Freaky Friday	2003	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Charlie's Angels	2000	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Stuart Little	1999	PG	PARENTAL GUIDANCE	Colour Movie
102763240	Murder by Death	1976	PG	PARENTAL GUIDANCE	Colour Movie

16 rows selected.

Credit 3b

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, M.MOVIENO, M.TITLE, M.RUNTIME, M.RATINGCODE, R.shortdesc, M.TMDB_SCORE
FROM MOVIE3240 M LEFT JOIN  RATINGMOVIE3240 R on M.RATINGCODE = R.ratingcode
WHERE (M.TMDB_SCORE not between 6 and 7.8) and ((M.RATINGCODE = 'MA' and (M.RUNTIME between 100 and 101)) or (M.RATINGCODE = 'G' and M.RUNTIME <100) or (M.RATINGCODE = 'M' and (M.RUNTIME between 122 and 125)) or (M.RATINGCODE = 'PG' and M.RUNTIME >110))
ORDER BY M.MOVIENO;
```

Script Output | Task completed in 0.986 seconds

STUID	MOVIENO	TITLE	RUNTIME	RA	SHORTDESC	TMDB_SCORE
102763240	415	Batman and Robin	125	M	MATURE (15+)	4.8
102763240	2157	Lost in Space	130	PG	PARENTAL GUIDANCE	5.2
102763240	8810	Evita	134	PG	PARENTAL GUIDANCE	5.7
102763240	8966	Twilight	122	M	MATURE (15+)	5.5
102763240	9824	Mystery Men	121	PG	PARENTAL GUIDANCE	5.9
102763240	10264	Hamlet	130	PG	PARENTAL GUIDANCE	5.8
102763240	31052	The Accidental Tourist	121	PG	PARENTAL GUIDANCE	5.9
102763240	32856	Valentine's Day	125	M	MATURE (15+)	5.4
102763240	43074	Ghostbusters	116	PG	PARENTAL GUIDANCE	5.3
102763240	68728	Oz: The Great and Powerful	130	PG	PARENTAL GUIDANCE	5.5
102763240	86834	Noah	139	PG	PARENTAL GUIDANCE	5.9

11 rows selected.

Credit 3c

Paste your screen capture(s) for this task here.

```
SELECT  DISTINCT RELYEAR, '102763240' as STUID
FROM MOVIE3240
ORDER BY RELYEAR DESC;
```

Script Output | Task completed in 1.016 seconds

RELYEAR	STUID
2016	102763240
2015	102763240
2014	102763240
2013	102763240
2012	102763240
2011	102763240
2010	102763240
2009	102763240
2008	102763240
2007	102763240
2006	102763240

RELYEAR	STUID
2005	102763240
2004	102763240
2003	102763240
2002	102763240
2001	102763240
2000	102763240
1999	102763240
1998	102763240
1997	102763240
1996	102763240
1995	102763240

Credit 3d

Paste your screen capture(s) for this task here.

```
UPDATE MOVIE3240
SET TMDB_VOTES = 0;

SELECT '102763240' as STUID, MOVIENO, TITLE, TMDB_VOTES, TMDB_SCORE
FROM MOVIE3240
ORDER BY MOVIENO;
```

Script Output | Task completed in 1.102 seconds

STUID	MOVIENO	TITLE	TMDB_VOTES	TMDB_SCORE
102763240	22	Pirates of the Caribbean: The Curse of the Black Pearl	0	6.9
102763240	24	Kill Bill: Vol. 1	0	6.9
102763240	70	Million Dollar Baby	0	7
102763240	77	Memento	0	7.4
102763240	78	Blade Runner	0	7.5
102763240	95	Armageddon	0	6.2
102763240	114	Pretty Woman	0	6.4
102763240	118	Charlie and the Chocolate Factory	0	6
102763240	120	The Lord of the Rings: The Fellowship of the Ring	0	7.4
102763240	121	The Lord of the Rings: The Two Towers	0	7.4
102763240	122	The Lord of the Rings: The Return of the King	0	7.5

```
UPDATE MOVIE3240
SET TMDB_VOTES = 1
WHERE TMDB_SCORE >=6.7 and RATINGCODE = 'M' or RUNTIME <=110 AND RATINGCODE = 'PG';

SELECT '102763240' as STUID, MOVIENO, TITLE, TMDB_VOTES, TMDB_SCORE
FROM MOVIE3240
ORDER BY MOVIENO;
```

Script Output | Task completed in 1.119 seconds

STUID	MOVIENO	TITLE	TMDB_VOTES	TMDB_SCORE
102763240	22	Pirates of the Caribbean: The Curse of the Black Pearl	1	6.9
102763240	24	Kill Bill: Vol. 1	0	6.9
102763240	70	Million Dollar Baby	1	7
102763240	77	Memento	0	7.4
102763240	78	Blade Runner	0	7.5
102763240	95	Armageddon	0	6.2
102763240	114	Pretty Woman	0	6.4
102763240	118	Charlie and the Chocolate Factory	0	6
102763240	120	The Lord of the Rings: The Fellowship of the Ring	1	7.4
102763240	121	The Lord of the Rings: The Two Towers	1	7.4
102763240	122	The Lord of the Rings: The Return of the King	1	7.5

STUID	MOVIENO	TITLE	TMDB_VOTES	TMDB_SCORE
102763240	137	Groundhog Day	1	6.8
102763240	141	Donnie Darko	0	7.3
102763240	142	Brokeback Mountain	0	6.5
102763240	153	Lost in Translation	0	7
102763240	155	The Dark Knight	1	7.7
102763240	161	Ocean's Eleven	1	6.8
102763240	162	Edward Scissorhands	1	6.7
102763240	163	Ocean's Twelve	0	6.3
102763240	164	Breakfast at Tiffany's	1	6.8
102763240	187	Sin City	0	6.8
102763240	236	Muriel's Wedding	0	7

```
SELECT '102763240' as STUID, MOVIENO, TITLE, TMDB_VOTES, TMDB_SCORE
FROM MOVIE3240
WHERE TMDB_VOTES = 1
ORDER BY MOVIENO;
```

Script Output | Task completed in 1.341 seconds

STUID	MOVIENO	TITLE	TMDB_VOTES	TMDB_SCORE
102763240	22	Pirates of the Caribbean: The Curse of the Black Pearl	1	6.9
102763240	70	Million Dollar Baby	1	7
102763240	120	The Lord of the Rings: The Fellowship of the Ring	1	7.4
102763240	121	The Lord of the Rings: The Two Towers	1	7.4
102763240	122	The Lord of the Rings: The Return of the King	1	7.5
102763240	137	Groundhog Day	1	6.8
102763240	155	The Dark Knight	1	7.7
102763240	161	Ocean's Eleven	1	6.8
102763240	162	Edward Scissorhands	1	6.7
102763240	164	Breakfast at Tiffany's	1	6.8
102763240	272	Batman Begins	1	7.1

STUID	MOVIENO	TITLE	TMDB_VOTES	TMDB_SCORE
102763240	314	Catwoman	1	4.9
102763240	381	To Catch a Thief	1	7.4
102763240	403	Driving Miss Daisy	1	7.2
102763240	489	Good Will Hunting	1	7.1
102763240	562	Die Hard	1	6.9
102763240	597	Titanic	1	6.8
102763240	620	Ghostbusters	1	6.8
102763240	642	Butch Cassidy and the Sundance Kid	1	6.4
102763240	651	MASH	1	7.5
102763240	674	Harry Potter and the Goblet of Fire	1	6.7
102763240	675	Harry Potter and the Order of the Phoenix	1	6.7

Credit 3e

Paste your screen capture(s) for this task here.

```
SELECT '102763240' as STUID, TITLE
FROM MOVIE3240
WHERE TITLE not like '%b%' and TITLE not like '%e%' and TITLE not like '%a%' and TITLE not like '%u%'
ORDER BY TITLE desc;
```

Script Output

Task completed in 1.21 seconds

```
STUID     TITLE
--------- ----------------------------------------------------------------------------------------------------
102763240 Wild Hogs
102763240 Twilight
102763240 Toy Story 3
102763240 Toy Story 2
102763240 Toy Story
102763240 Thor
102763240 Sin City
102763240 School of Rock
102763240 Psycho
102763240 Notting Hill
102763240 Minions

STUID     TITLE
--------- ----------------------------------------------------------------------------------------------------
102763240 MASH
102763240 King Kong
102763240 Kill Bill: Vol. 2
102763240 Kill Bill: Vol. 1
102763240 Johnny English
102763240 Finding Dory
102763240 Envy
102763240 Boyhood
102763240 Argo
102763240 Apollo 13

21 rows selected.
```

Credit 3f

Paste your screen capture(s) for this task here.

MOBILE (RegNo, Model, Memory, Battery, LaunchDate)

```
DROP TABLE MOBILE3240;
CREATE TABLE MOBILE3240 (
  RegNo        VARCHAR(10) PRIMARY KEY
, Model        VARCHAR(20)
, Memory       NUMBER(5)
, Battery      NUMBER(7)
, LaunchDate   DATE
);
```

Credit 3g

Paste your screen capture(s) for this task here.

create_mobile_sql.sql | insert_mobile_sql.sql

```
INSERT INTO MOBILE3240 (RegNo, Model, Memory, Battery, LaunchDate) VALUES ('S1101', 'Skyline', 64, 200, TO_DATE('07/07/2019','DD/MM/YYYY'));
INSERT INTO MOBILE3240 (RegNo, Model, Memory, Battery, LaunchDate) VALUES ('P1251', 'PeslaY', 128, 150, TO_DATE('23/01/2018','DD/MM/YYYY'));
INSERT INTO MOBILE3240 (RegNo, Model, Memory, Battery, LaunchDate) VALUES ('H6701', 'HensorX', 64, 300, TO_DATE('17/10/2020','DD/MM/YYYY'));
INSERT INTO MOBILE3240 (RegNo, Model, Memory, Battery, LaunchDate) VALUES ('T5678', 'TetraV', 32, 30, TO_DATE('07/08/2017','DD/MM/YYYY'));
```

Credit 3h

Paste your screen capture(s) for this task here.

```
SELECT '102763240' AS STUID, RegNo, Model, Memory, Battery, LaunchDate
FROM MOBILE3240
ORDER BY RegNo;
```

STUID	REGNO	MODEL	MEMORY	BATTERY	LAUNCHDAT
102763240	H6701	HensorX	64	300	17-OCT-20
102763240	P1251	PeslaY	128	150	23-JAN-18
102763240	S1101	Skyline	64	200	07-JUL-19
102763240	T5678	TetraV	32	30	07-AUG-17

Credit 3i

Paste your screen capture(s) for this task here.

```
SELECT '102763240' AS STUID, RegNo, Model, Memory, Battery, LaunchDate
FROM MOBILE3240
WHERE Battery >100 and Battery <300;
```

Query Result | Script Output

Task completed in 0.035 seconds

STUID	REGNO	MODEL	MEMORY	BATTERY	LAUNCHDAT
102763240	S1101	Skyline	64	200	07-JUL-19
102763240	P1251	PeslaY	128	150	23-JAN-18

Credit 3j

Paste your screen capture(s) for this task here.

```
SELECT '102763240' AS STUID, RegNo, Model, Memory, Battery, LaunchDate
FROM MOBILE3240
WHERE launchdate >TO_DATE('01,01,2018','DD/MM/YYYY')
ORDER BY LaunchDate desc;
```

```
STUID     REGNO      MODEL          MEMORY    BATTERY LAUNCHDAT
--------- ---------- ---------- ---------- ---------- ---------
102763240 H6701      HensorX            64        300 17-OCT-20
102763240 S1101      Skyline            64        200 07-JUL-19
102763240 P1251      PeslaY            128        150 23-JAN-18
```

Database Analysis & Design
INF10002

Task 4 – Pass Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Pass 4a

Paste your screen capture(s) for this task here.

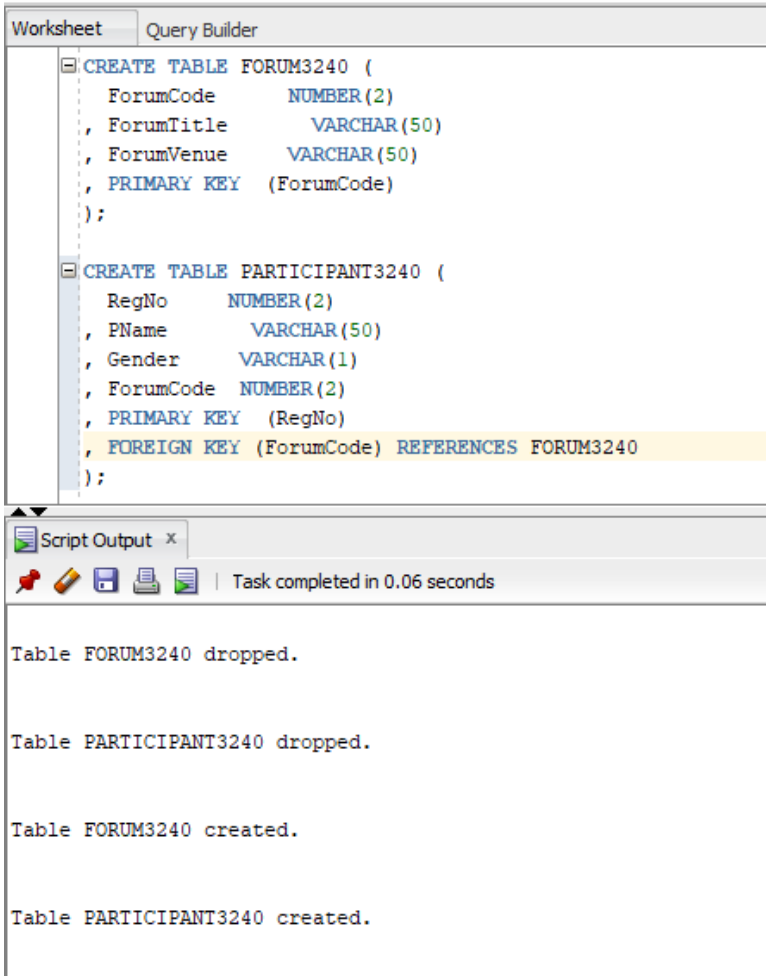
FORUM (ForumCode, ForumTitle, ForumVenue)

PARTICIPANT (RegNo, PName, Gender, ForumCode)

FOREIGN KEY(ForumCode) References FORUM

Pass 4b

Paste your screen capture(s) for this task here.



Pass 4c

Paste your screen capture(s) for this task here.

```
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (56, 'Clip of the week','Green Land');
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (57, 'The Hit Song','City Wind Mall');
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (58, 'Stay Healthy','Hits Tower');
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (59, 'Card Master','Central Garden');

INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (10, 'Sofia Nimes','F',56);
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (11, 'Lim Chee Kheng','M',59);
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (12, 'Benedict Tham','F',58);
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (13, 'Marry Bonnet','M',57);
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (14, 'Khalid Yaseen Baig','M',58);
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (15, 'Abdul Aziz','M',58);
```

Script Output

Task completed in 0.126 seconds

```
1 row inserted.

1 row inserted.
```

Pass 4d

Paste your screen capture(s) for this task here.

```
DESCRIBE FORUM3240;
SELECT *
FROM FORUM3240;
```

Script Output | Task completed in 0.546 seconds

```
Name       Null?    Type
---------- -------- ------------
FORUMCODE  NOT NULL NUMBER(2)
FORUMTITLE          VARCHAR2(50)
FORUMVENUE          VARCHAR2(50)

 FORUMCODE FORUMTITLE                                          FORUMVENUE
---------- -------------------------------------------------- --------------------------------------------------
        56 Clip of the week                                   Green Land
        57 The Hit Song                                       City Wind Mall
        58 Stay Healthy                                       Hits Tower
        59 Card Master                                        Central Garden
```

Worksheet | Query Builder

```
DESCRIBE PARTICIPANT3240;
SELECT *
FROM PARTICIPANT3240;
```

Script Output | Task completed in 0.351 seconds

```
Name       Null?    Type
---------- -------- ------------
REGNO      NOT NULL NUMBER(2)
PNAME               VARCHAR2(50)
GENDER              VARCHAR2(1)
FORUMCODE           NUMBER(2)

     REGNO PNAME                                             G  FORUMCODE
---------- -------------------------------------------------- - ----------
        10 Sofia Nimes                                        F         56
        11 Lim Chee Kheng                                     M         59
        12 Benedict Tham                                      F         58
        13 Marry Bonnet                                       M         57
        14 Khalid Yaseen Baig                                 M         58
        15 Abdul Aziz                                         M         58

6 rows selected.
```

Pass 4e

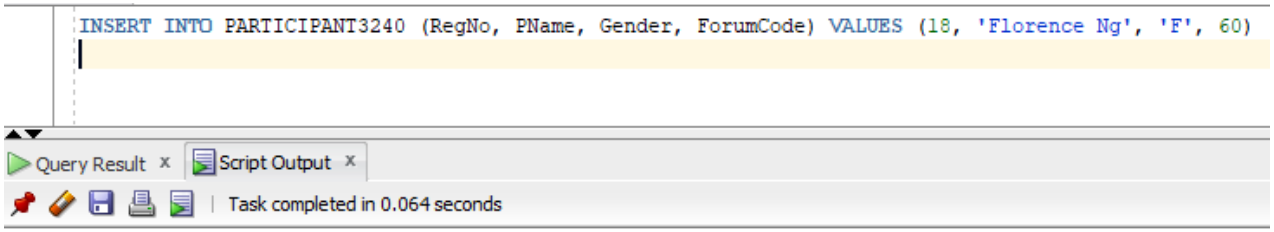
Paste your screen capture(s) for this task here.

Worksheet | Query Builder

```
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (56, 'Lets go Vegan','Song Market');
```

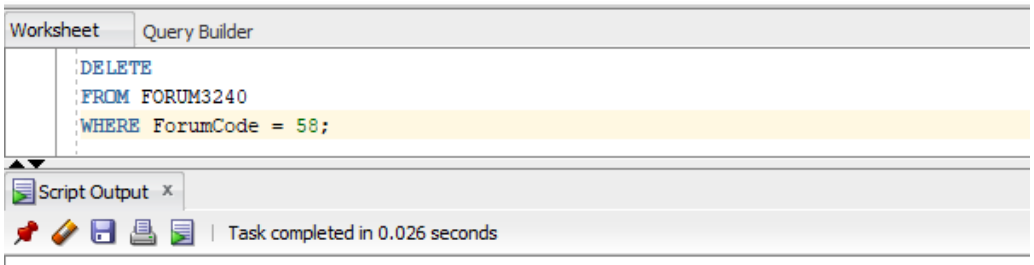
```
Error starting at line : 1 in command -
INSERT INTO FORUM3240 (ForumCode, ForumTitle, ForumVenue) VALUES (56, 'Lets go Vegan','Song Market')
Error report -
ORA-00001: unique constraint (SYSTEM.SYS_C008502) violated
```

The code returned an error as there cant be 2 same primary key, as primary keys need to be unique.




```
Error starting at line : 1 in command -
INSERT INTO PARTICIPANT3240 (RegNo, PName, Gender, ForumCode) VALUES (18, 'Florence Ng', 'F', 60)
Error report -
ORA-02291: integrity constraint (SYSTEM.SYS_C008618) violated - parent key not found
```

The Code returned an error an error as the specified foreign key constraint was not found

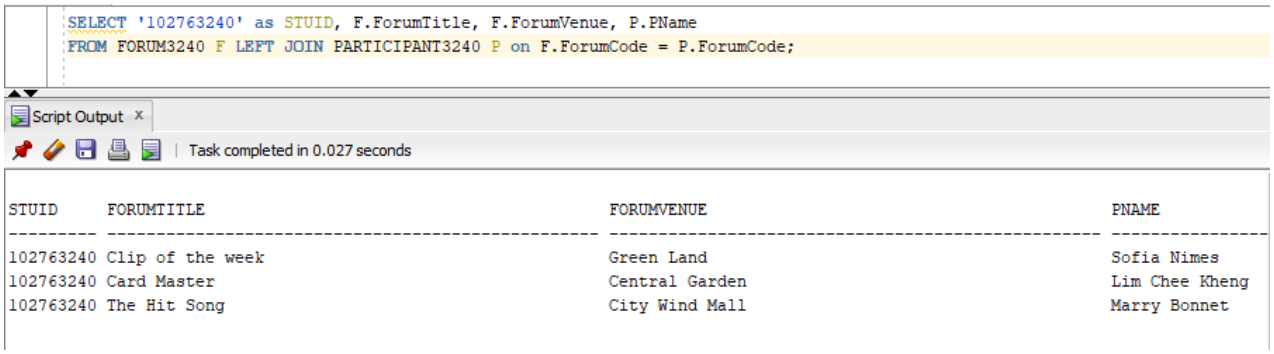



```
Error starting at line : 1 in command -
DELETE
FROM FORUM3240
WHERE ForumCode = 58
Error report -
ORA-02292: integrity constraint (SYSTEM.SYS_C008618) violated - child record found
```

The code returned an error as ForumCode was a foriegn key in Participant table, and a child element was present in participant table.

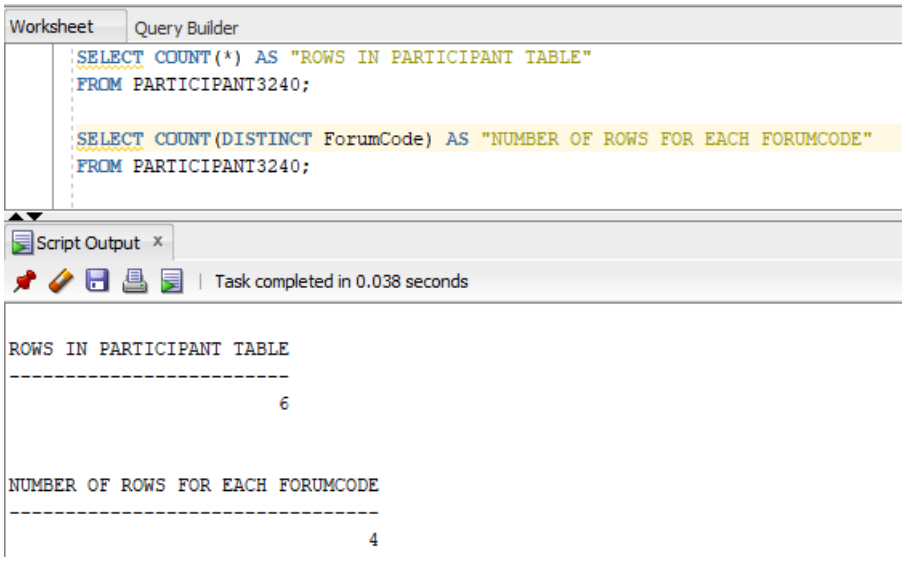
Pass 4f

Paste your screen capture(s) for this task here.



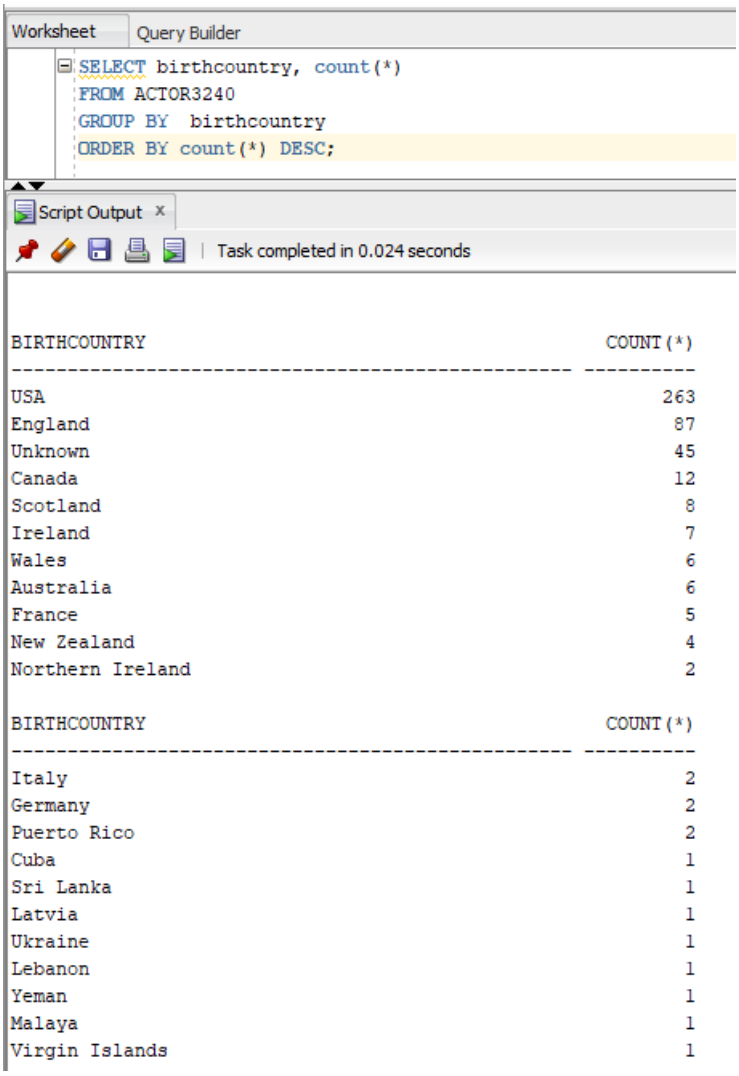
Pass 4g

Paste your screen capture(s) for this task here.



Pass 4h

Paste your screen capture(s) for this task here.

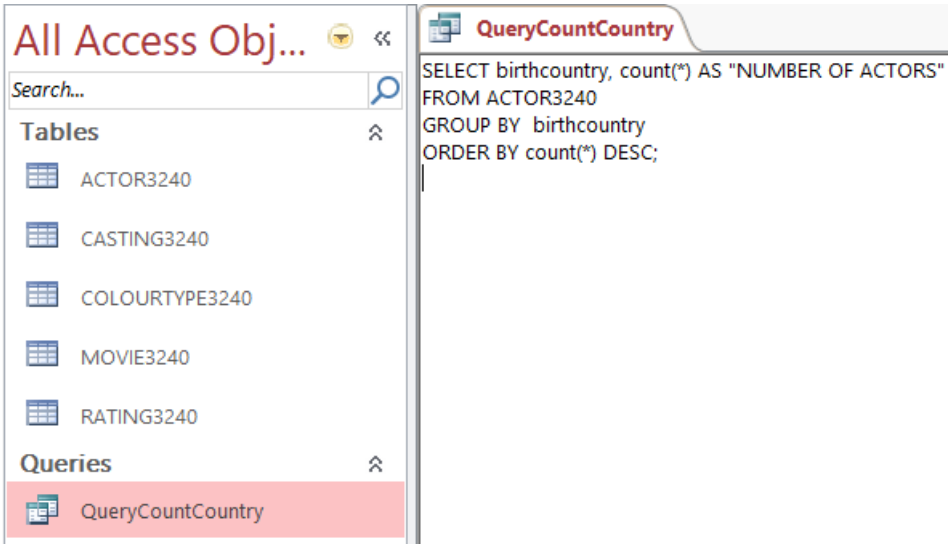


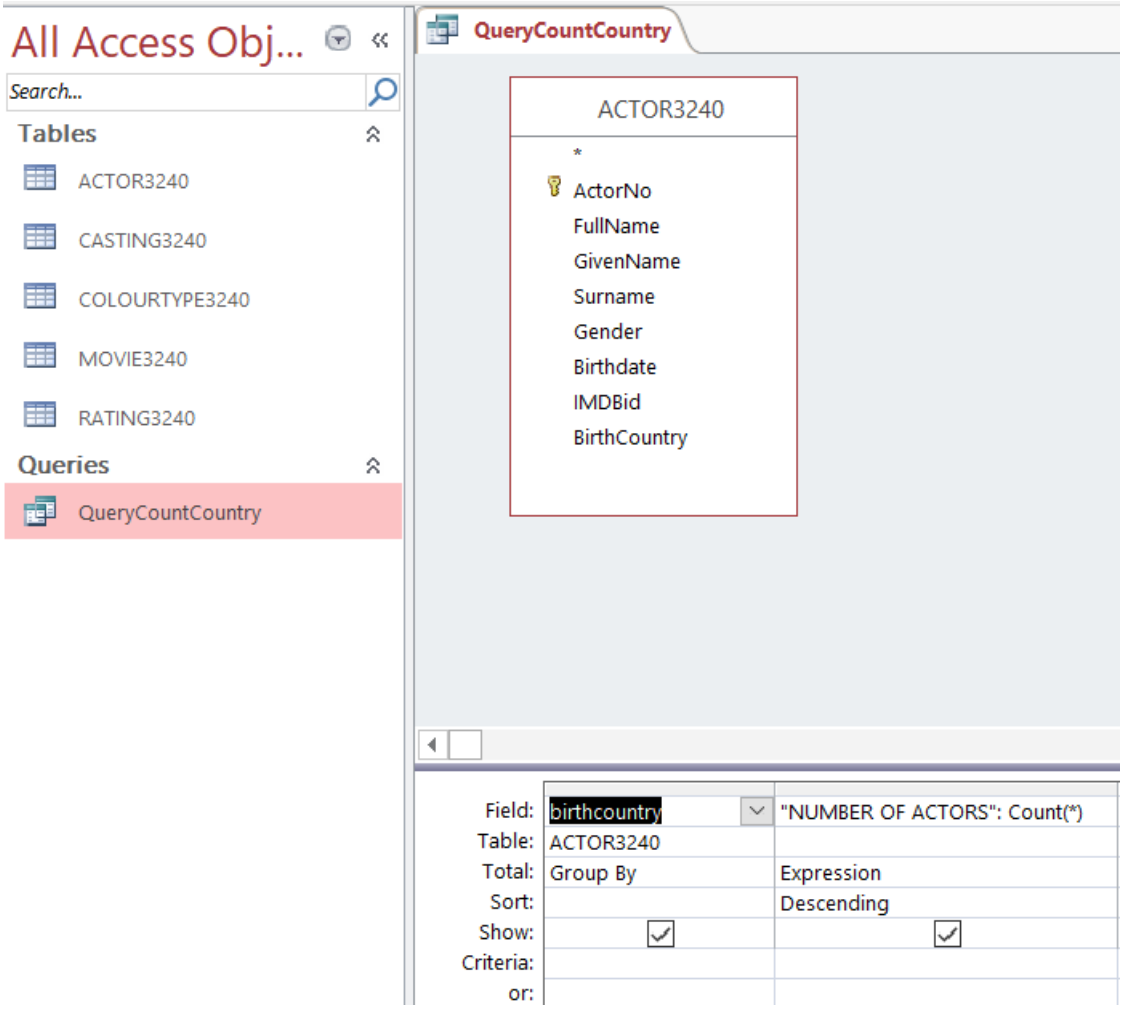
BIRTHCOUNTRY	COUNT(*)
USA	263
England	87
Unknown	45
Canada	12
Scotland	8
Ireland	7
Wales	6
Australia	6
France	5
New Zealand	4
Northern Ireland	2

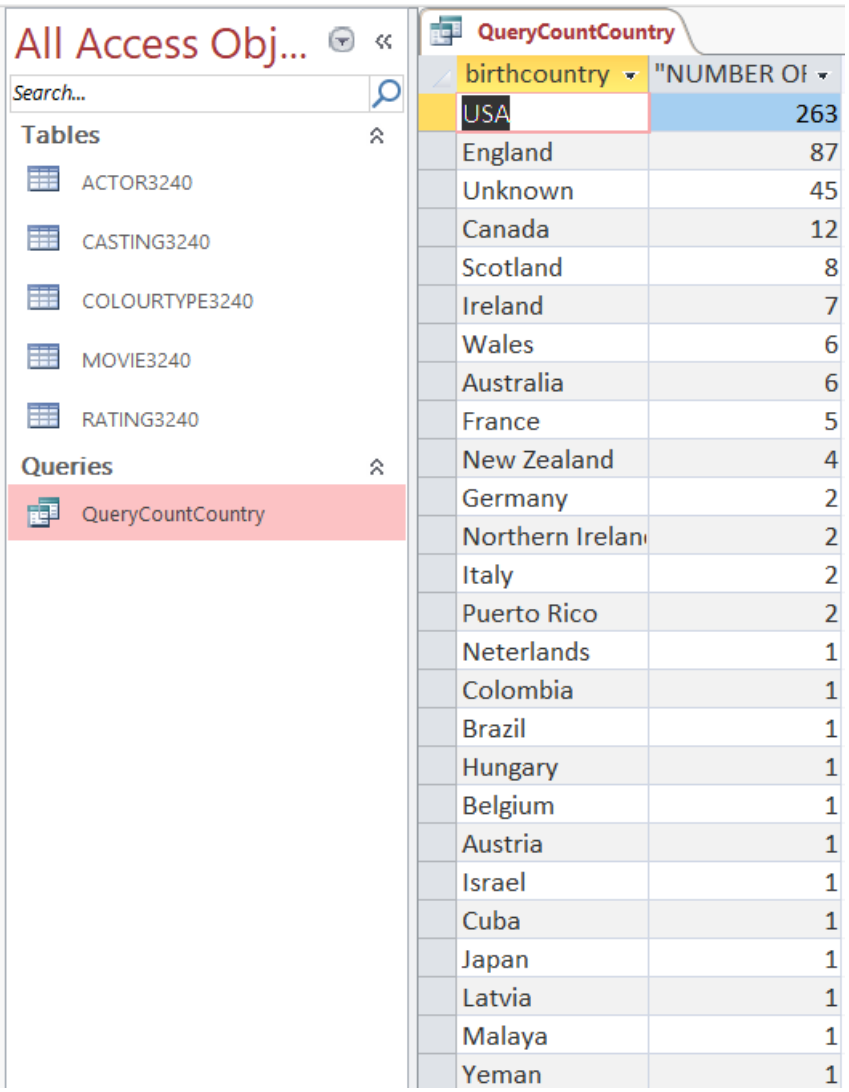
BIRTHCOUNTRY	COUNT(*)
Italy	2
Germany	2
Puerto Rico	2
Cuba	1
Sri Lanka	1
Latvia	1
Ukraine	1
Lebanon	1
Yeman	1
Malaya	1
Virgin Islands	1

Pass 4i

Paste your screen capture(s) for this task here.




All Access Obj...
Search...
Tables
ACTOR3240
CASTING3240
COLOURTYPE3240
MOVIE3240
RATING3240
Queries
QueryCountCountry
QueryCountCountry
ACTOR3240
*
ActorNo
FullName
GivenName
Surname
Gender
Birthdate
IMDBid
BirthCountry
Field: birthcountry "NUMBER OF ACTORS": Count(*)
Table: ACTOR3240
Total: Group By Expression
Sort: Descending
Show:
Criteria:
or:

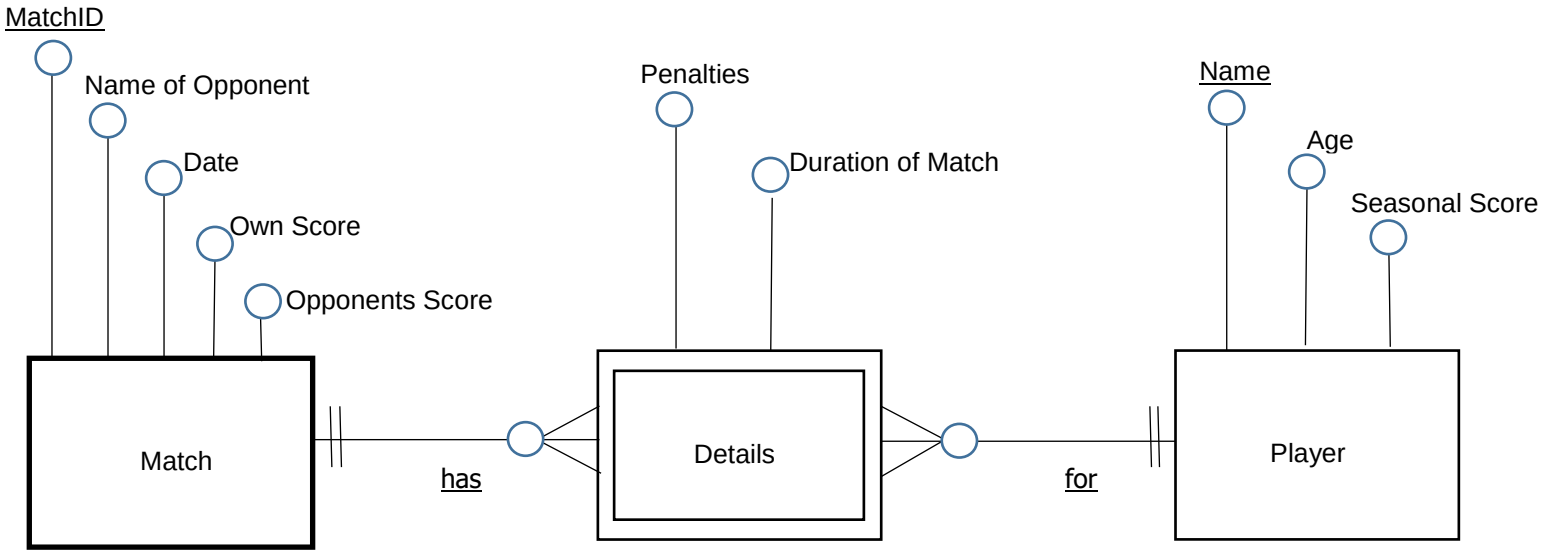


QueryCountCountry

birthcountry	"NUMBER OF
USA	263
England	87
Unknown	45
Canada	12
Scotland	8
Ireland	7
Wales	6
Australia	6
France	5
New Zealand	4
Germany	2
Northern Irelan	2
Italy	2
Puerto Rico	2
Neterlands	1
Colombia	1
Brazil	1
Hungary	1
Belgium	1
Austria	1
Israel	1
Cuba	1
Japan	1
Latvia	1
Malaya	1
Yeman	1

Pass 4j

Paste your screen capture(s) for this task here.



Match (MatchID, Name of Opponent, Date, Own Score, Opponents scores)

Player (Name, Age, Seasonal Score)

Details (MatchID, Name, Penalties, Duration of match)

FOREIGN KEY(MatchID) References Match

FOREIGN KEY(Name) References Player

Pass 4k

Paste your screen capture(s) for this task here.

Comedian (Name, Address, Contact, Email)

Show (ID, Title, Description)

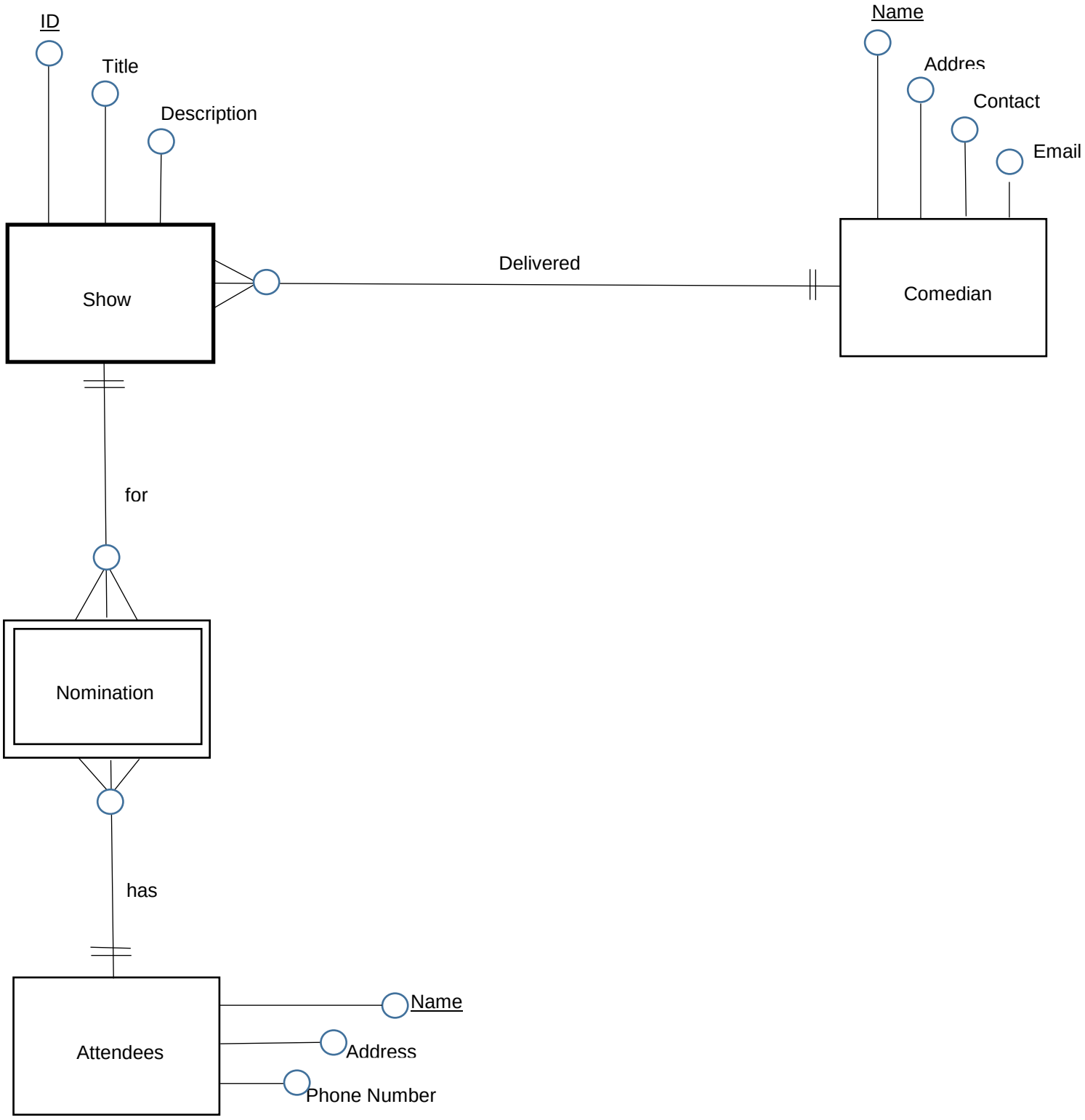
FOREIGN KEY(Name) References Comedian

Nommination (ID, Name, Nomination)

FOREIGN KEY(ID) References Show

FOREIGN KEY(Name) References Attendees

Attendees (Name, Address, Phone Number)


ID
Title
Description
Show
Delivered
Name
Addres
Contact
Email
Comedian
for
Nomination
has
Attendees
Name
Address
Phone Number

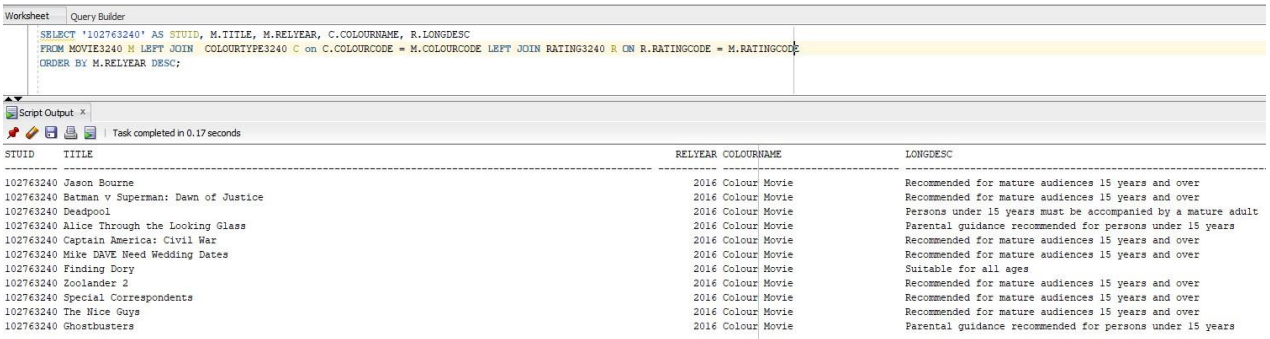
Database Analysis & Design
INF10002

Task 4 – Credit Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Credit 4a

Paste your screen capture(s) for this task here.



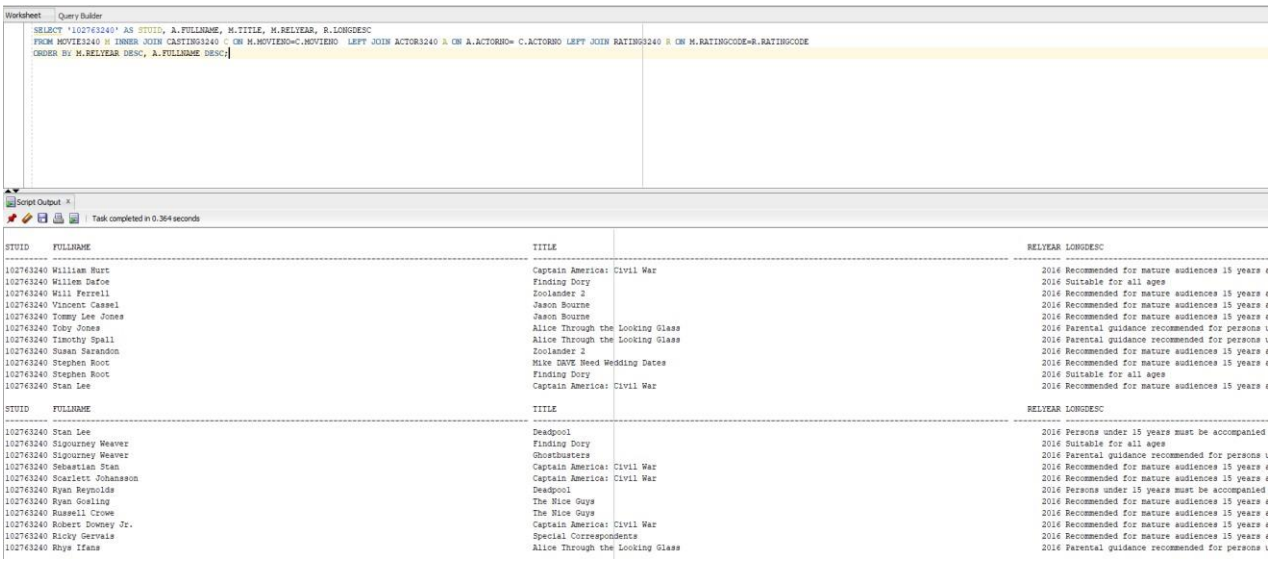
```
SELECT '102763240' AS STUID, M.TITLE, M.RELYEAR, C.COLOURNAME, R.LONGDESC
FROM MOVIE3240 M LEFT JOIN  COLOURTYPE3240 C on C.COLOURCODE = M.COLOURCODE LEFT JOIN RATING3240 R ON R.RATINGCODE = M.RATINGCODE
ORDER BY M.RELYEAR DESC;
```

Task completed in 0.17 seconds

STUID	TITLE	RELYEAR	COLOURNAME	LONGDESC
102763240	Jason Bourne	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Batman v Superman: Dawn of Justice	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Deadpool	2016	Colour Movie	Persons under 15 years must be accompanied by a mature adult
102763240	Alice Through the Looking Glass	2016	Colour Movie	Parental guidance recommended for persons under 15 years
102763240	Captain America: Civil War	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Mike DAVE Need Wedding Dates	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Finding Dory	2016	Colour Movie	Suitable for all ages
102763240	Zoolander 2	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Special Correspondents	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	The Nice Guys	2016	Colour Movie	Recommended for mature audiences 15 years and over
102763240	Ghostbusters	2016	Colour Movie	Parental guidance recommended for persons under 15 years

Credit 4b

Paste your screen capture(s) for this task here.



```
SELECT '102763240' AS STUID, A.FULLNAME, M.TITLE, M.RELYEAR, R.LONGDESC
FROM MOVIE3240 M INNER JOIN CASTING3240 C ON M.MOVIENO=C.MOVIENO  LEFT JOIN ACTOR3240 A ON A.ACTORNO= C.ACTORNO LEFT JOIN RATING3240 R ON M.RATINGCODE=R.RATINGCODE
ORDER BY M.RELYEAR DESC, A.FULLNAME DESC;
```

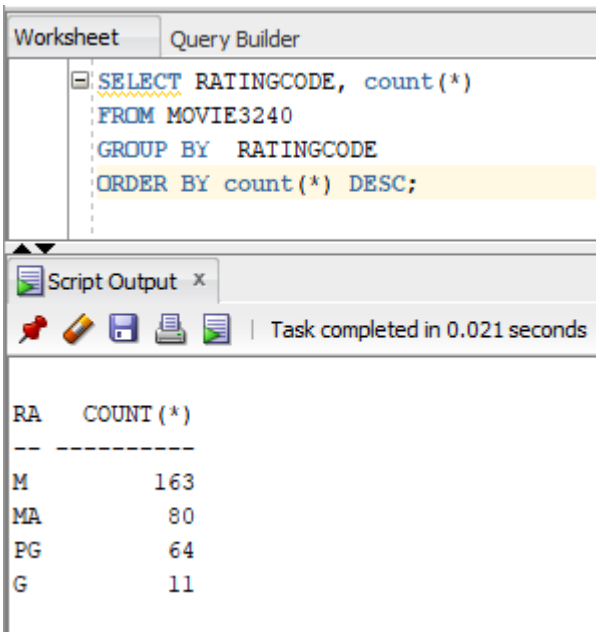
Task completed in 0.364 seconds

STUID	FULLNAME	TITLE	RELYEAR	LONGDESC
102763240	William Hurt	Captain America: Civil War	2016	Recommended for mature audiences 15 years a
102763240	Willem Dafoe	Finding Dory	2016	Suitable for all ages
102763240	Will Ferrell	Zoolander 2	2016	Recommended for mature audiences 15 years a
102763240	Vincent Cassel	Jason Bourne	2016	Recommended for mature audiences 15 years a
102763240	Tommy Lee Jones	Jason Bourne	2016	Recommended for mature audiences 15 years a
102763240	Toby Jones	Alice Through the Looking Glass	2016	Parental guidance recommended for persons u
102763240	Timothy Spall	Alice Through the Looking Glass	2016	Parental guidance recommended for persons u
102763240	Susan Sarandon	Zoolander 2	2016	Recommended for mature audiences 15 years a
102763240	Stephen Root	Mike DAVE Need Wedding Dates	2016	Recommended for mature audiences 15 years a
102763240	Stephen Root	Finding Dory	2016	Suitable for all ages
102763240	Stan Lee	Captain America: Civil War	2016	Recommended for mature audiences 15 years a

STUID	FULLNAME	TITLE	RELYEAR	LONGDESC
102763240	Stan Lee	Deadpool	2016	Persons under 15 years must be accompanied
102763240	Sigourney Weaver	Finding Dory	2016	Suitable for all ages
102763240	Sigourney Weaver	Ghostbusters	2016	Parental guidance recommended for persons u
102763240	Sebastian Stan	Captain America: Civil War	2016	Recommended for mature audiences 15 years a
102763240	Scarlett Johansson	Captain America: Civil War	2016	Recommended for mature audiences 15 years a
102763240	Ryan Reynolds	Deadpool	2016	Persons under 15 years must be accompanied
102763240	Ryan Gosling	The Nice Guys	2016	Recommended for mature audiences 15 years a
102763240	Russell Crowe	The Nice Guys	2016	Recommended for mature audiences 15 years a
102763240	Robert Downey Jr.	Captain America: Civil War	2016	Recommended for mature audiences 15 years a
102763240	Ricky Gervais	Special Correspondents	2016	Recommended for mature audiences 15 years a
102763240	Rhys Ifans	Alice Through the Looking Glass	2016	Parental guidance recommended for persons u

Credit 4c

Paste your screen capture(s) for this task here.



Worksheet | Query Builder

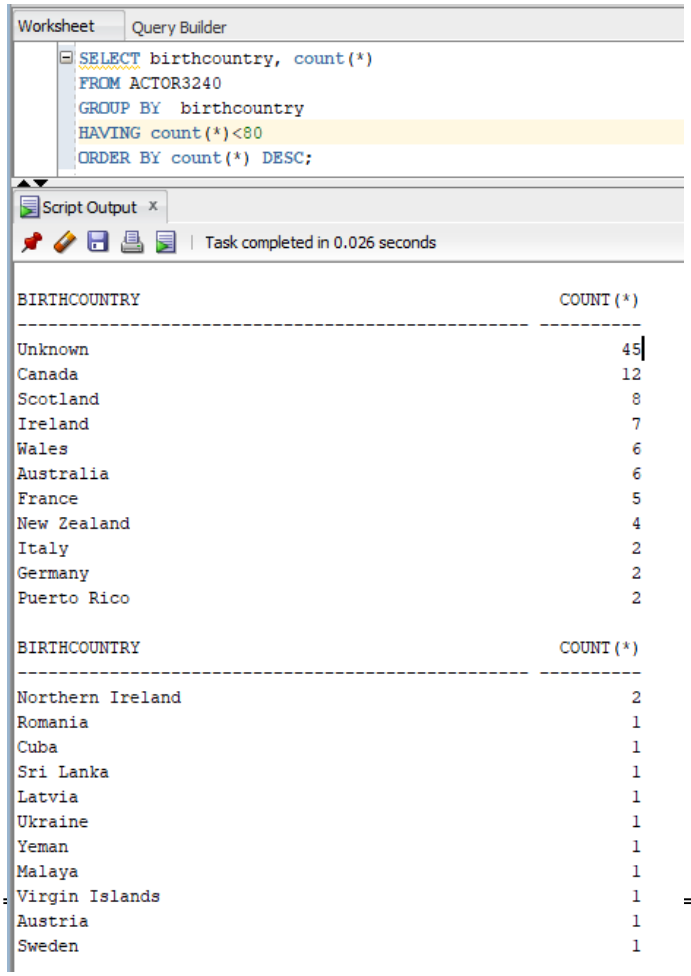
```
SELECT RATINGCODE, count(*)
FROM MOVIE3240
GROUP BY  RATINGCODE
ORDER BY count(*) DESC;
```

Script Output | Task completed in 0.021 seconds

```
RA   COUNT(*)
-- ----------
M           163
MA           80
PG           64
G            11
```

Credit 4d

Paste your screen capture(s) for this task here.



Worksheet | Query Builder

```
SELECT birthcountry, count(*)
FROM ACTOR3240
GROUP BY  birthcountry
HAVING count(*)<80
ORDER BY count(*) DESC;
```

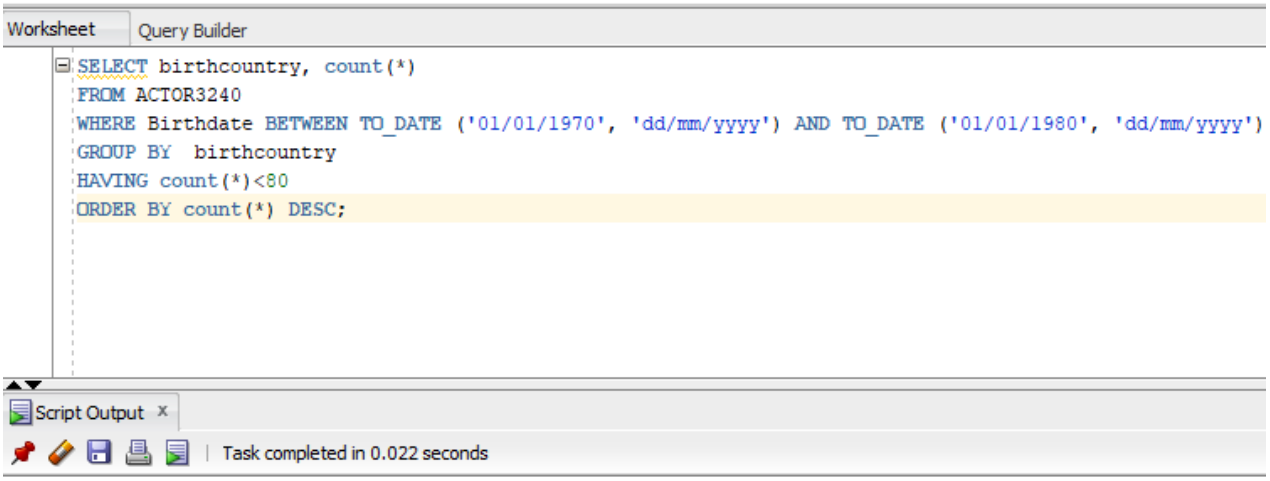
Script Output | Task completed in 0.026 seconds

```
BIRTHCOUNTRY                                       COUNT(*)
-------------------------------------------------- ----------
Unknown                                                    45
Canada                                                     12
Scotland                                                    8
Ireland                                                     7
Wales                                                       6
Australia                                                   6
France                                                      5
New Zealand                                                 4
Italy                                                       2
Germany                                                     2
Puerto Rico                                                 2

BIRTHCOUNTRY                                       COUNT(*)
-------------------------------------------------- ----------
Northern Ireland                                            2
Romania                                                     1
Cuba                                                        1
Sri Lanka                                                   1
Latvia                                                      1
Ukraine                                                     1
Yeman                                                       1
Malaya                                                      1
Virgin Islands                                              1
Austria                                                     1
Sweden                                                      1
```

Credit 4e

Paste your screen capture(s) for this task here.




```
BIRTHCOUNTRY                                       COUNT(*)
-------------------------------------------------- ----------
USA                                                        50
England                                                    14
Unknown                                                     5
Canada                                                      2
Italy                                                       1
France                                                      1
New Zealand                                                 1
Australia                                                   1
Scotland                                                    1
Brazil                                                      1
Wales                                                       1

BIRTHCOUNTRY                                       COUNT(*)
-------------------------------------------------- ----------
Ireland                                                     1
Germany                                                     1

13 rows selected.
```

Credit 4f

Paste your screen capture(s) for this task here.

```
SELECT A.FULLNAME, count(C.MOVIENO)
FROM ACTOR3240 A INNER JOIN CASTING3240 C ON A.ACTORNO=C.ACTORNO
GROUP BY A.FULLNAME
ORDER BY A.FULLNAME DESC;
```

Script Output

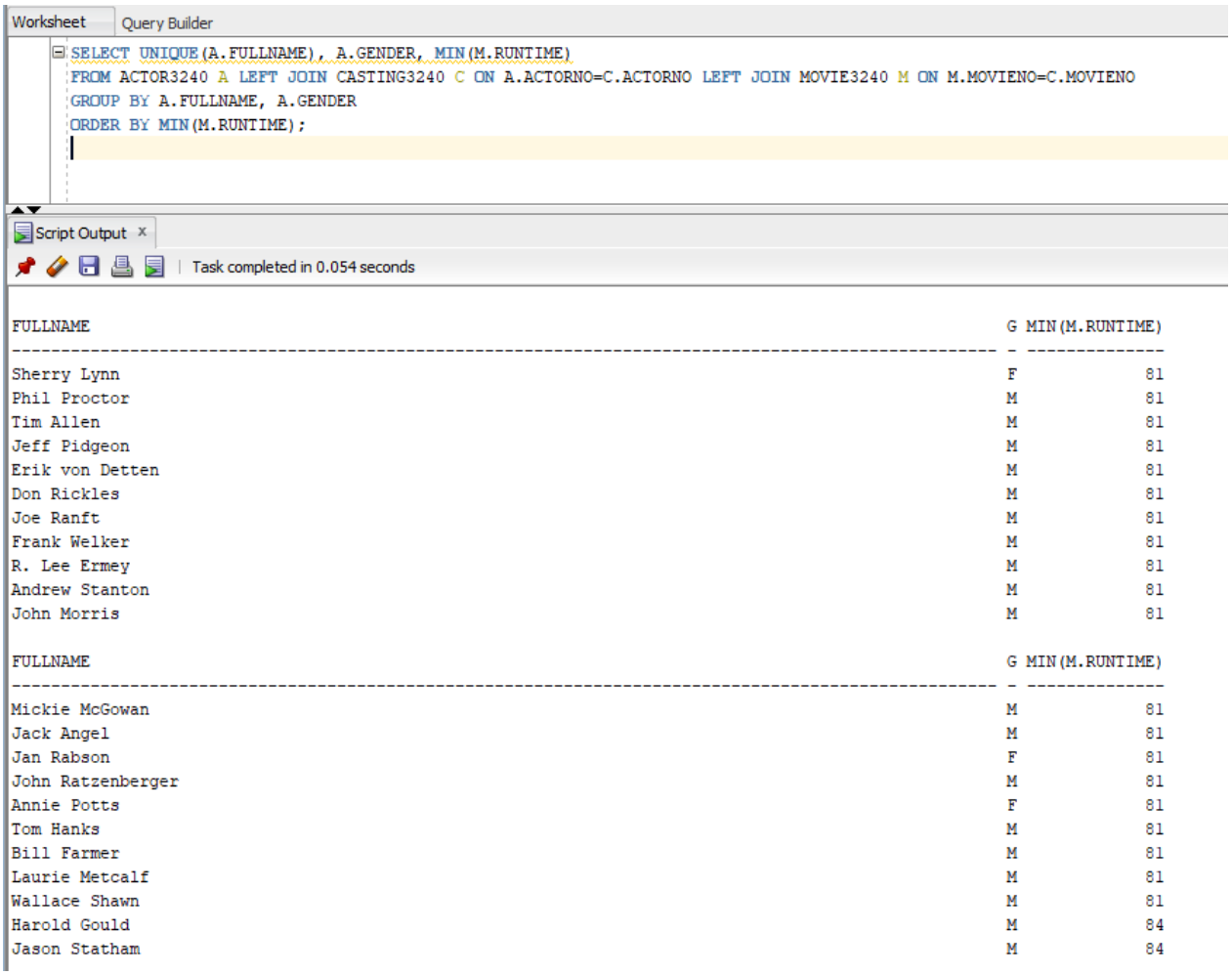
Task completed in 0.051 seconds

FULLNAME	COUNT(C.MOVIENO)
Zoe Saldana	4
Zeljko Ivanek	4
Woody Harrelson	5
Winona Ryder	4
Willow Shields	3
Willie Garson	3
William Sadler	3
William Melling	4
William Hurt	4
William H. Macy	4
William Fichtner	4

FULLNAME	COUNT(C.MOVIENO)
William Atherton	3
Willem Dafoe	6
Will Ferrell	9
Warwick Davis	7
Walter Matthau	3
Wallace Shawn	4
Vivica A. Fox	3
Vincent Cassel	4
Vince Vaughn	7
Viggo Mortensen	4
Verne Troyer	3

Credit 4g

Paste your screen capture(s) for this task here.



Worksheet | Query Builder

```
SELECT UNIQUE(A.FULLNAME), A.GENDER, MIN(M.RUNTIME)
FROM ACTOR3240 A LEFT JOIN CASTING3240 C ON A.ACTORNO=C.ACTORNO LEFT JOIN MOVIE3240 M ON M.MOVIENO=C.MOVIENO
GROUP BY A.FULLNAME, A.GENDER
ORDER BY MIN(M.RUNTIME);
```

Script Output | Task completed in 0.054 seconds

FULLNAME	G	MIN(M.RUNTIME)
Sherry Lynn	F	81
Phil Proctor	M	81
Tim Allen	M	81
Jeff Pidgeon	M	81
Erik von Detten	M	81
Don Rickles	M	81
Joe Ranft	M	81
Frank Welker	M	81
R. Lee Ermey	M	81
Andrew Stanton	M	81
John Morris	M	81

FULLNAME	G	MIN(M.RUNTIME)
Mickie McGowan	M	81
Jack Angel	M	81
Jan Rabson	F	81
John Ratzenberger	M	81
Annie Potts	F	81
Tom Hanks	M	81
Bill Farmer	M	81
Laurie Metcalf	M	81
Wallace Shawn	M	81
Harold Gould	M	84
Jason Statham	M	84

Worksheet | Query Builder

```
SELECT UNIQUE(A.FULLNAME), A.GENDER, MIN(M.RUNTIME)
FROM ACTOR3240 A LEFT JOIN CASTING3240 C ON A.ACTORNO=C.ACTORNO LEFT JOIN MOVIE3240 M ON M.MOVIENO=C.MOVIENO
WHERE M.RUNTIME = (SELECT MIN(M.RUNTIME) FROM MOVIE3240)
GROUP BY A.FULLNAME, A.GENDER
ORDER BY MIN(M.RUNTIME);
```

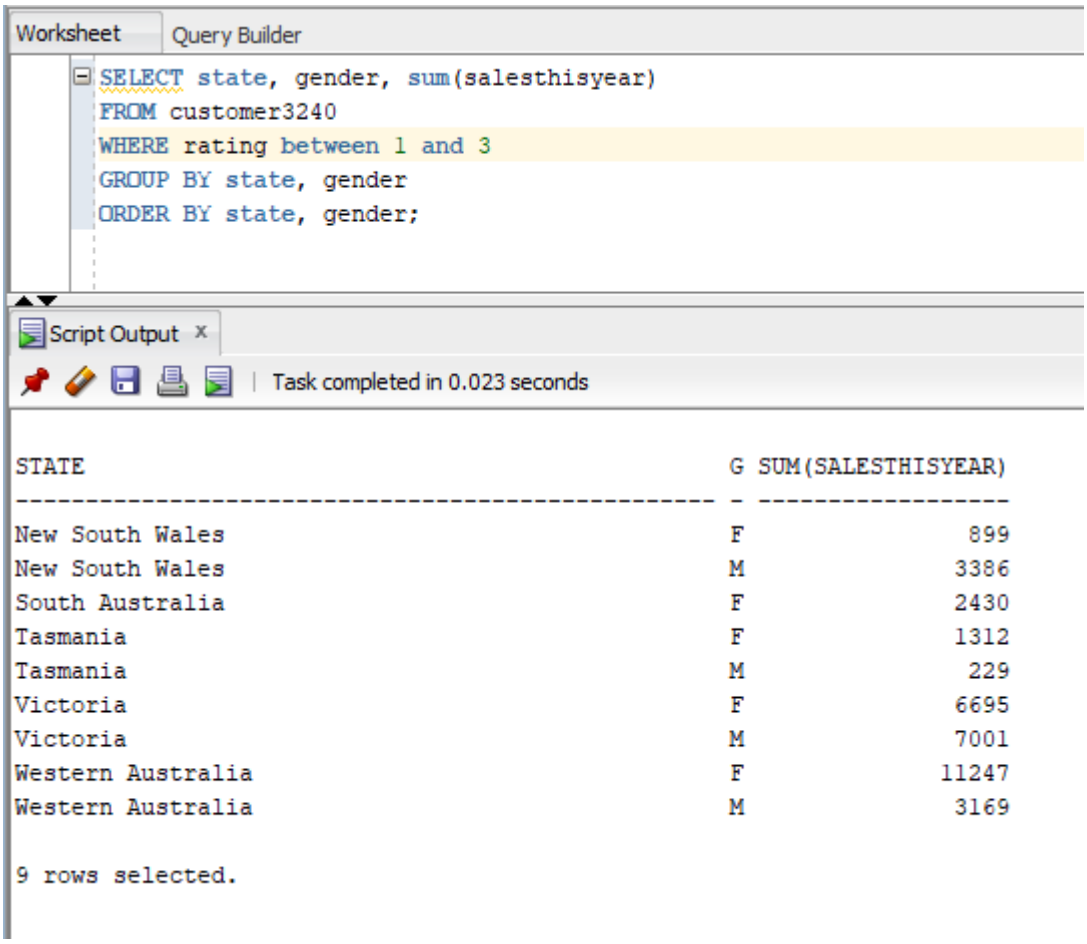
Script Output | Task completed in 0.053 seconds

FULLNAME	G	MIN(M.RUNTIME)
Jack Angel	M	81
Andrew Stanton	M	81
Bill Farmer	M	81
Erik von Detten	M	81
Jeff Pidgeon	M	81
Tim Allen	M	81
Laurie Metcalf	M	81
Mickie McGowan	M	81
Wallace Shawn	M	81
Sherry Lynn	F	81
Tom Hanks	M	81

FULLNAME	G	MIN(M.RUNTIME)
Don Rickles	M	81
Phil Proctor	M	81
John Ratzenberger	M	81
Frank Welker	M	81
Jan Rabson	F	81
R. Lee Ermey	M	81
Joe Ranft	M	81
John Morris	M	81
Annie Potts	F	81
Maggie Smith	F	84
Emily Blunt	F	84

Credit 4h

Paste your screen capture(s) for this task here.



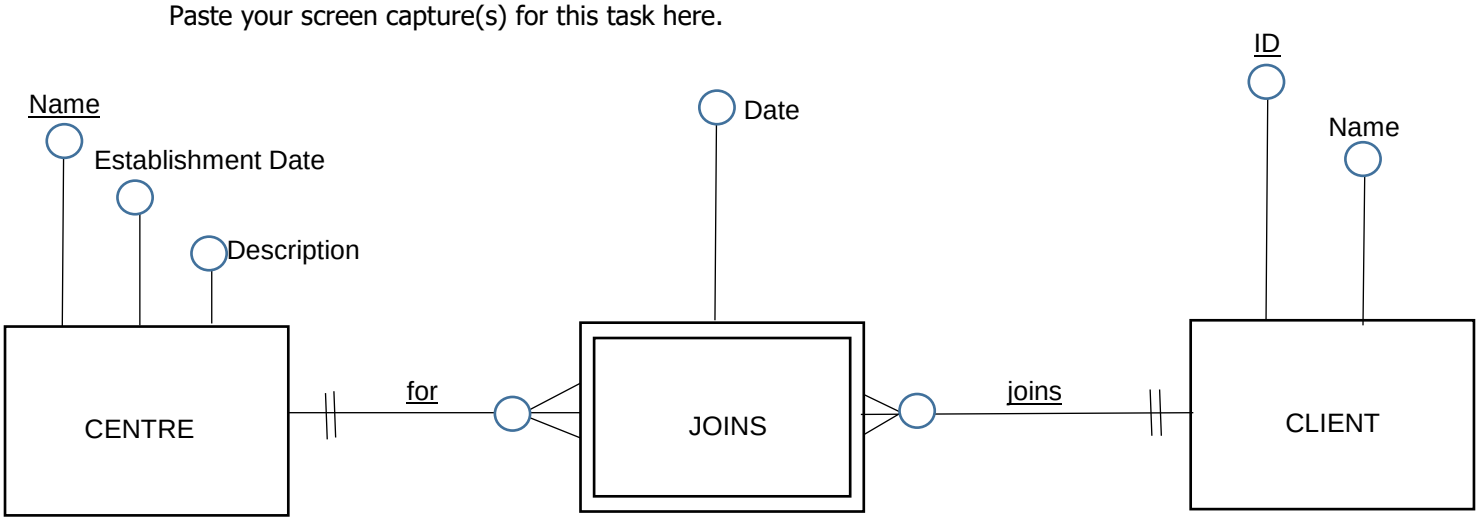
Database Analysis & Design
INF10002

Task 5 – Pass Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Pass 5a

Paste your screen capture(s) for this task here.



Pass 5b

Paste your screen capture(s) for this task here.

CENTRE (Name, Establishment Date, Description)

CLIENT (ID, Name)

JOINS (Date, Name, ID)

FOREIGN KEY(Name) References Centre

FOREIGN KEY(ID) References Client

Pass 5c

Paste your screen capture(s) for this task here.

```
CREATE TABLE CENTRE (
  Name      VARCHAR(20)
, Establishment Date       VARCHAR(50)
, Description      VARCHAR(50)
, PRIMARY KEY  (Name)
);

CREATE TABLE JOINS (
  Date      DATE
, Name       VARCHAR(20)
, ID      VARCHAR(10)
, PRIMARY KEY  (Name)
, PRIMARY KEY  (ID)
, FOREIGN KEY  (Name)  REFERENCES CENTRE
, FOREIGN KEY  (ID)  REFERENCES CLIENT
);

CREATE TABLE CLIENT (
  ID      VARCHAR(10)
, Name       VARCHAR(20)
, PRIMARY KEY  (ID)
);
```

Pass 5d

Paste your screen capture(s) for this task here.

Normalization is a database design technique used to generate relational schemas. It is often used as an alternative to ERDs. It requires no diagram. Unnormalized tables have potential anomalies which can be avoided by Normalizing the Database. There are several stages of Normalization, at each stage another potential anomalies is removed. The stages covered in our lecture are:

1. First Normal Form (1NF) which removes repetating groups

2. Second Normal Form (2NF) which removes Part Key Dependencies

3. Third Normal Form (3NF) which removes Non Key Dependencies

The Main aim of Normalization is to achive Third Normal Form(3NF)

Pass 5e

Paste your screen capture(s) for this task here.

CustId	Name	Phone	CarRego	MakeModel	StartDate	ReturnDate
125	John Coles	0401112233	1AU8HK	Mazda 3	31/08/2020	7/09/2020
125	John Coles	0401112233	1LM3AB	Hyundai i30	14/11/2020	21/11/2020
278	Erin Trump	04266121455	1AU8HK	Mazda 3	12/09/2020	19/09/2020
278	Erin Trump	04266121455	1KA2CA	Toyota Camry	1/10/2020	8/10/2020
278	Erin Trump	04266121455	1CZ8JK	Mazda 3	10/11/2020	12/11/2020
278	Erin Trump	04266121455	1AU8HK	Mazda 3	26/11/2020	1/12/2020
721	Emma Knox	0423544117	1LM3AB	Hyundai i30	10/09/2020	13/09/2020

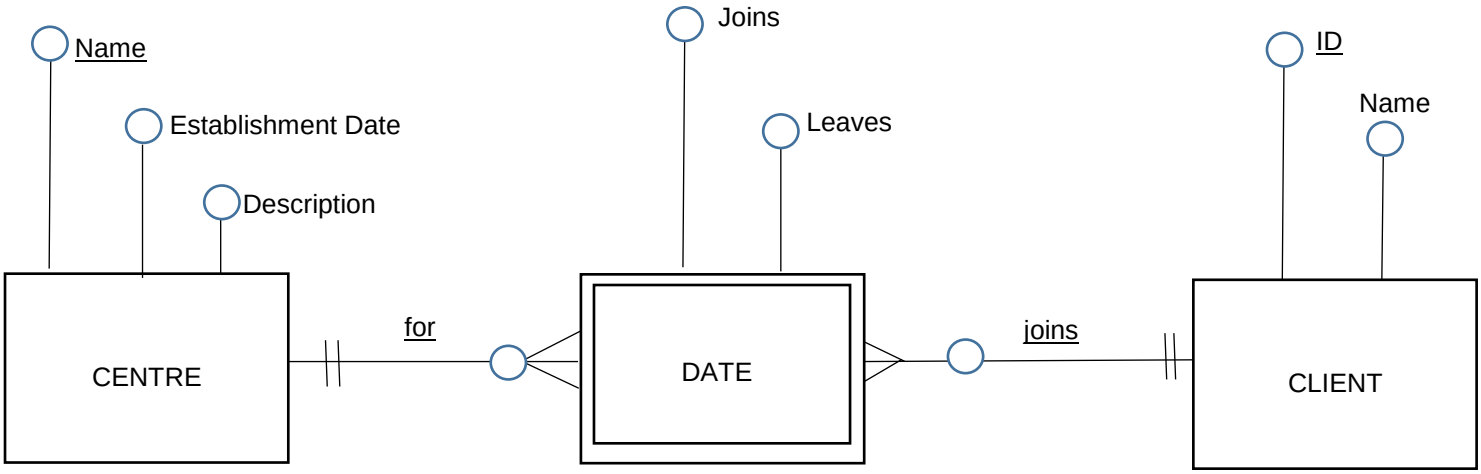
Database Analysis & Design
INF10002

Task 5 – Credit Submission

Student Number: 102763240
Student Name: Khalid Yaseen Baig

Credit 5a

Paste your screen capture(s) for this task here



CENTRE (Name, Establishment Date, Description)

CLIENT (ID, Name)

DATE (Joins, Leaves, Name, ID)

FOREIGN KEY(Name) References Centre

FOREIGN KEY(ID) References Client

CENTRE

Name	Establishment Date	Description
Beginner Pools	01/01/2012	Pools for Beginners with Trainers
Kids Pools	22/03/2017	Pools for Kids

Pro Pools	07/06/2014	Deep Pools for Professionals

CLIENT

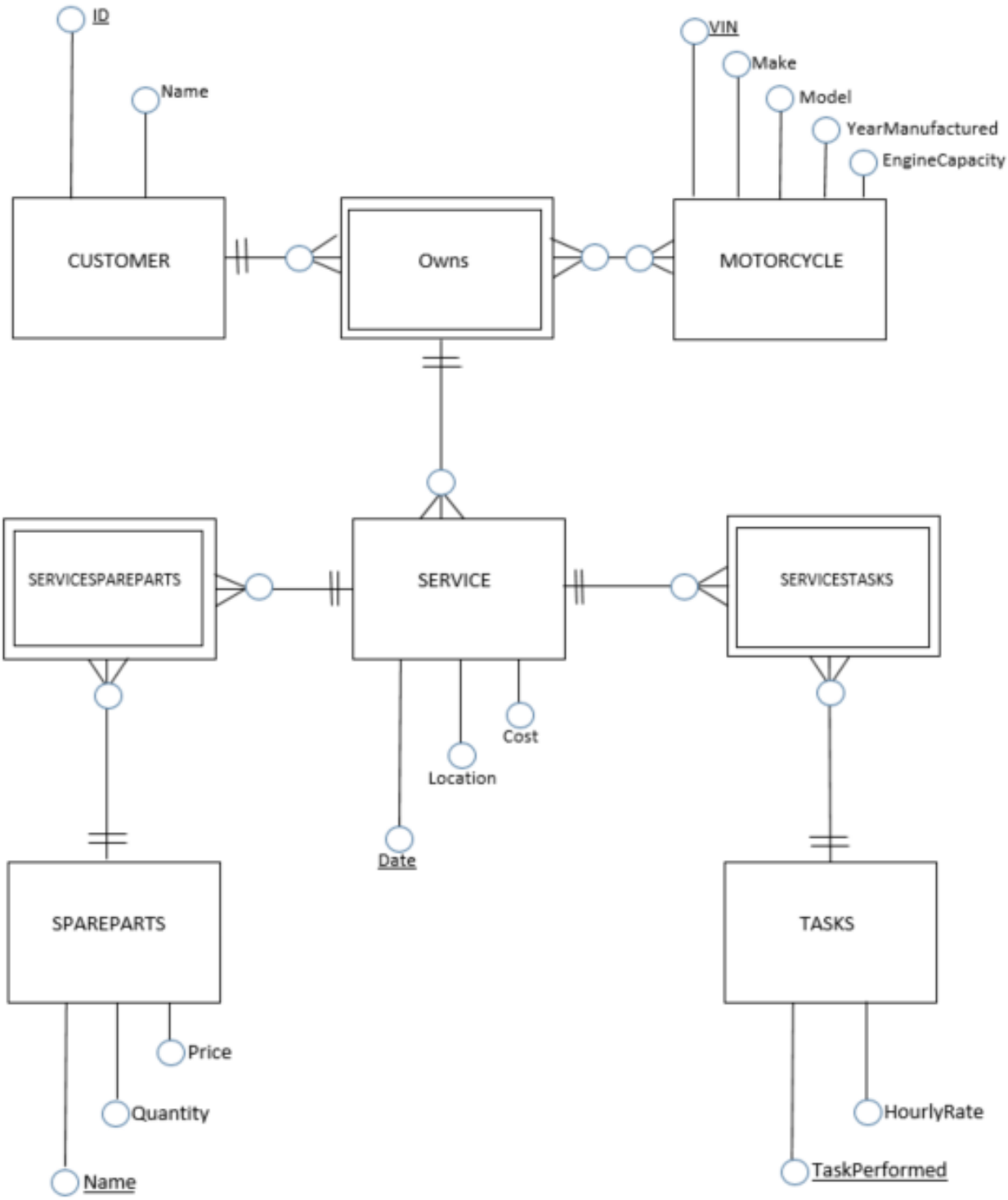
ID	Name
033	Khalid Baig
937	Joel Johnson
612	Zakaria Ahmed

DATE

Name	ID	Joins	Leaves
Beginner Pools	937	25/04/2018	30/03/2020
Kids Pools	612	09/06/2019	21/01/2020
Pro Pools	033	01/07/2014	25/05/2020

Credit 5b

Paste your screen capture(s) for this task here.



Credit 5c

Paste your screen capture(s) for this task here.

CUSTOMER (ID, Name)

Owns (ID, VIN)

FOREIGN KEY(ID) References CUSTOMER

FOREIGN KEY(VIN) References MOTORCYCLE

MOTOTRCYCLE (VIN, Make, Model, YearManufactured, EngineCapacity)

SERVICE (Date, Location, Cost)

SERVICESPAREPARTS (DATE, Name)

FOREIGN KEY(Date) References SERVICE

FOREIGN KEY(Name) References SPAREPARTS

SPAREPARTS(Name, Quantity, Price)

SERVICETASKS (DATE, TaskPerformed)

FOREIGN KEY(Date) References SERVICE

FOREIGN KEY(TaskPerformed) References TASKS

TASKS(TaskPerformed, HourlyRate)

Credit 5d

Paste your screen capture(s) for this task here.

```
CREATE TABLE CUSTOMER (
  ID     VARCHAR(5)
, Name      VARCHAR(10)
, PRIMARY KEY  (ID)
);

CREATE TABLE OWNS (
  ID     VARCHAR(5)
, VIN     VARCAHR(5)
, PRIMARY KEY  (ID)
, PRIMARY KEY  (VIN)
```

```
, FOREIGN KEY  (ID) REFERENCES CUSTOMER
, FOREIGN KEY  (VIN) REFERENCES CUSTOMER
);


CREATE TABLE MOTORCYCLE (
  VIN     VARCAHR(5)
, Make     VARCHAR(10)
, Model     VARCHAR(10)
, YearManufactured     INT(4)
, EngineCapacity      INT(6)
, PRIMARY KEY  (VIN)
);

CREATE TABLE SERVICE (
 Date     DATE
, Location     VARCHAR(10)
, Cost      INT (10)
, PRIMARY KEY  (Date)
);

CREATE TABLE SERVICESPAREPARTS(
 Date     DATE
, Name   VARCHAR(10)
, PRIMARY KEY  (Date)
, PRIMARY KEY  (Name)
, FOREIGN KEY  (Date) REFERENCES SERVICE
, FOREIGN KEY  (VIN) REFERENCES SPAREPARTS
);


CREATE TABLE  SPAREPARTS (
  Name   VARCHAR(10)
```

```
, Quantity      INT (10)
, Price      INT (10)
, PRIMARY KEY  (Name)
);

CREATE TABLE SERVICETASKS(
 Date     DATE
, TaskPerformed    VARCHAR(10)
, PRIMARY KEY  (Date)
, PRIMARY KEY  (TaskPerformed)
, FOREIGN KEY  (Date) REFERENCES SERVICE
, FOREIGN KEY  (TaskPerformed) REFERENCES TASKS
);

CREATE TABLE TASKS (
  TaskPerformed    VARCHAR(10)
, HourlyRate      INT (10)
);
```

Credit 5e

Paste your screen capture(s) for this task here.

CustID	CarRego	StartDate	ReturnDate
125	1AU8HK	31/08/2020	7/09/2020
125	1LM3AB	14/11/2020	21/11/2020
278	1AU8HK	12/09/2020	19/09/2020
278	1KA2CA	1/10/2020	8/10/2020
278	1CZ8JK	10/11/2020	12/11/2020
278	1AU8HK	26/11/2020	1/12/2020
721	1LM3AB	10/09/2020	13/09/2020

CustID	Name
125	John Coles
278	Erin Trump
721	Emma Knox

Name	Phone
John Coles	0401112233
Erin Trump	04266121455
Emma Knox	0423544117

CarRego	MakeModel
1AU8HK	Mazda 3
1LM3AB	Hyundai i30
1KA2CA	Toyota Camry
1CZ8JK	Mazda 3

Credit 5f

Paste your screen capture(s) for this task here.

START TRANSACTION

INSERT INTO Action (ActionID, ActionDateTime, Action, ProdID, ProdQty, ProdCost)

VALUES (1008, '21/01/2021', 'Purchase', 'G43546', 2, 2100.00);

UPDATE Product

SET QtyInStock -2;

END TRANSACTION

START TRANSACTION

INSERT INTO Action (ActionID, ActionDateTime, Action, ProdID, ProdQty, ProdCost)

VALUES (1026, '23/01/2021', 'Return', 'G43546', -1, 1050.00);

UPDATE Product

SET QtyInStock +1;

END TRANSACTION

A smooth transaction occurs when the quantity of the item purchased is less than the quantity of the item available and the quantity of item returned is more then one. If the quantity of products available is less or 0 or the quantity purchased is less than the number available, a sale may have faults. If the refund amount for an item is zero, the refund will fail. If there is an electrical blackout during the exchange, both actions will fail.

A Transaction is Committed when All changes made by the transactions are permanent. A transaction rollback occurs when none of the operations of that transaction are completed and all changes made by the transaction are cancelled.

For Example,

When the Purchase is recorded successfully and the table is updated then the transaction is committed.

When the Refund statement was not completed due to an electrical outage and table wasn't updated then the transaction is rolled-back.