Task 1 – Simple Database and Report (A)

(Individual work, no groups)

Due Date:

Please refer to the Instructional Plan for all assessment deadlines.

Description:

This assessment will make use of a central narrative (case study) file, please note that this case study may be unique to your intake, as such the answers generated will be exclusive to your cohort ensuring a customized experience and supporting academic integrity initiatives.

This assessment has multiple objectives for student learning and skill(s) development:

1. This scenario will provide students with an academic-based case which is meant to:
    a. Afford a valuable hands-on experience in utilizing industry-standard tools.
    b. Familiarize students with practical applications of dbms tools to a business environment.
    c. Introduce students to the basics of database management and base functionality.
2. This deliverable will afford course faculty a chance to gauge student preparedness and ability to.
    a. Leverage basic DBMS tools and navigate a data management interface.
    b. Derive value from data and prepare it in a business format.
3. This assessment is part of a series of deliverables that make use of a continuing narrative, which affords students the opportunity to experience first-hand how any project can leverage expertise from multiple different fields to properly develop a functional solution.

Please refer to the *Resources* section at the end of this document for location information regarding the central narrative file (case study) to be used for completing this assessment.

Tasks:

Referring to narrative section 6*.4.1.1. "Orders Database"* in your course's case narrative you will:

1. Utilizing Microsoft Access, you are to leverage the content within the prescribed narrative to develop a database (.ACCDB) and report (.PDF).
    a. You will be constructing the entities [Tables] found within the *"Orders Schema"* component.
        i. You need only include the entities [Tables] and attributes [columns] from within this schema.
        ii. Any Foreign Key field within Orders Schema that connects to a Primary Key field outside of the Orders schema can be treated as a standard field, allowing the insertion of any relevant data. You are not required to build any PKs or Tables outside of Orders Schema.
        iii. Entities are to be named without the schema name. Orders.CustomerOrder will appear as CustomerOrder.
    b. You are required to include 5 tuples [Records or rows] of data per table where applicable.
        i. Ensure one Order [OrderID] has at least 2 products [ProductID] associated to it.
        ii. Insert your name and student number in a single record anywhere in the dataset. This does not need to make sense according to any other data constraints.
    c. Take a screenshot of the Datasheet view of each data table. Ensure that all fields names and values are visible.
    d. Create relationships that enforce referential integrity between the PK [Primary Key] – FK [Foreign Key] fields.
    e. Take a screenshot of the Relationships screen. Ensure that all tables are showing, and that all table and field names are fully visible.

2. Using Microsoft Access Report Wizard you will develop a simple report.
    a. The name of the report must include your first and last name. Ie. For Dianne Gravel this would be "DianneGravelReport". This must be visible in the Report Header section of the report.
    b. The body of the report must display the PK values for each of the 4 tables, organized by ProductID in descending order.
    c. Ensure all headings are clearly visible. Print or screenshot the first page of the report and include it in the PDF document.
3. Combine the outputs from 1c, 1e, and 2c into a PDF document and submit to your eConestoga dropbox.

Format Requirements:

The following requirements are enforced for this assessment.

- **Length[1] of paper:** N/A
- **Number of files:** 1
- **File Name:** See "O3 – Student Submissions Naming Convention.pdf"
- **Audience and Tone:** N/A
- **Citation Style:** APA[2] (required)
- **Title Page:** ***(10% penalty if you do not include)***
  College Name, Program Code, Course Code, Course Section, Assignment Title, Student Name, Date
- **Font Style:**
  - Body Size: 11pt
  - Font Style: Calibri
- **Line Spacing:** 1.08pt (Microsoft Default)
- **Margins:**
  - Narrow setting (0.5")
- **Document Format:**
  - Header for each page including: Date, Course code, Student name
  - Dropbox submission through eConestoga
  - PDF

Success Criteria:

This assessment's overall weight can be found on the *Instructional Plan (IP)* and reflected within the eConestoga grade book. Any student that discovers a conflict existing between the IP and grade book shall notify their course faculty member.

For specific evaluation standards, students shall consult the associated assessment rubric found in the *Rubrics* section of eConestoga.

- Failure to submit an assessment by the specified end date, to the correct dropbox, will result in a grade of zero (0).
- No opportunity will be provided to make up for an unsubmitted deliverable.
- It is the student's responsibility to ensure that their work has been submitted through eConestoga, ontime, to the correct course and in the correct folder.
- Be aware that Conestoga College's Academic Offense policy will be enforced.

[1] Page count does not include; cover page, table of content, large format images, or bibliography

[2] For details on APA style referencing you are to visit https://apa.conestogac.on.ca/ reference page(s)

Resources:

- A unique narrative has been assigned to your cohort, the narrative file for this assessment can be found in one of two of the following locations:
    - A segment of the narrative PDF containing specific sections of content will be found directly within the assessment folder through eConestoga.
    - (1) Narrative (PDF) file will be available within the *Supplementary Materials* module through eConestoga.
- The *Writing Services center* provides writing support through https://lib.conestogac.on.ca/writing-services
    - Downloadable PDF instructions on making an appointment with Conestoga College's Writing Services are located here: https://lib.conestogac.on.ca/ld.php?content_id=35144762

Task 2 – Functional Dependencies (A)

(Individual work, no groups)

Due Date:

Please refer to the Instructional Plan for all assessment deadlines.

Description:

This assessment will make use of a central narrative (case study) file, please note that this case study may be unique to your intake, as such the answers generated will be exclusive to your cohort ensuring a customized experience and supporting academic integrity initiatives.

This assessment has multiple objectives for student learning and skill(s) development:

1. This scenario will provide students with an academic-based case which is meant to:
    a. Establish an understanding of the relationship between data sets.
    b. Identify the structure of data and how record sets are formed.
2. This deliverable will afford course faculty a chance to gauge student preparedness and ability to:
    a. Understand the structure and relationship of data.
    b. To work within a business setting to elicit clarification on data, and data structure design, concerns.
3. This assessment is part of a series of deliverables that make use of a continuing narrative, which affords students the opportunity to experience first-hand how any project can leverage expertise from multiple different fields to properly develop a functional solution.

Please refer to the *Resources* section at the end of this document for location information regarding the central narrative file (case study) to be used for completing this assessment.

Tasks:

Your submission for this assessment will be formatted as a written report. Utilizing the Orders Schema, you are to address the following questions while referring to narrative section 6.4.1.1. *"Orders Database"* in your course's case narrative you will:

Section A

1. For the CustomerOrder table, identify and list out each of the functional dependencies that exist.
2. List out the primary key(s), foreign key(s) and candidate key(s) for the CustomerOrder table.
3. List all multivalued dependencies within the CustomerOrder table utilizing the following format:
    - Attribute ->-> Attribute
4. Transform the CustomerOrder entity [table] into the 4th Normal Form utilizing the following format:
    - Entity (PrimaryKey, *ForeignKey*, Attribute)
    - Underline the Primary Key(s)
    - Italicize the Foreign Key(s)

Section B

Assume that you are contracted as a Business Analyst consultant with the client organization from the narrative.

1. If you were to take on the task of updating the organizations database, enforcing the entity [table] structure changes you indicated in the previous question(s), what questions would you want to ask the resident Database Administrator, or Business Manager, for clarification? Keep the following concepts in mind while drafting your questions:

    - **Scope:** Keep a tight constraint on the topic(s) you are covering and ensure only value-added material is being elicited.
    - **Audience:** Understand who you are speaking to and write for that audience and level of knowledge. Write your work to appeal to the target audience.
    - **Language:** Professional level of written English skills goes a long way to ensure that no ambiguity or vagueness exists.
2. Identify at least two (2) potential issues found within any of the 4 tables of the Orders schema (CustomerOrder, ShipmentMethod, OrderStatus, ProductSelection). Be sure to clearly state what the issue is and how you would address these issues.

Format Requirements:

The following requirements are enforced for this assessment.

- **Length[1] of paper:** N/A
- **Number of files:** 1
- **File Name:** See "O3 – Student Submissions Naming Convention.pdf"
- **Audience and Tone:** N/A
- **Citation Style:** APA[2] (required)
- **Title Page:** ***(10% penalty if you do not include)***
  College Name, Program Code, Course Code, Course Section, Assignment Title, Student Name, Date
- **Font Style:**
  - Body Size: 11pt
  - Font Style: Calibri
- **Line Spacing:** 1.08pt (Microsoft Default)
- **Margins:**
  - Narrow setting (0.5")
- **Document Format:**
  - Header for each page including: Date, Course code, Student name
  - Dropbox submission through eConestoga
  - PDF

Success Criteria:

This assessment's overall weight can be found on the *Instructional Plan (IP)* and reflected within the eConestoga grade book. Any student that discovers a conflict existing between the IP and grade book shall notify their course faculty member.

For specific evaluation standards, students shall consult the associated assessment rubric found in the *Rubrics* section of eConestoga.

- Failure to submit an assessment by the specified end date, to the correct dropbox, will result in a grade of zero (0).
- No opportunity will be provided to make up for an unsubmitted deliverable.
- It is the student's responsibility to ensure that their work has been submitted through eConestoga, ontime, to the correct course and in the correct folder.
- Be aware that Conestoga College's Academic Offense policy will be enforced.

Resources:

- A unique narrative has been assigned to your cohort, the narrative file for this assessment can be found in one of two of the following locations:
  - A segment of the narrative PDF containing specific sections of content will be found directly within the assessment folder through eConestoga.
  - (1) Narrative (PDF) file will be available within the *Supplementary Materials* module through eConestoga.
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Task 3 – Building an ERD (A)

(Individual work, no groups)

Due Date:

Please refer to the Instructional Plan for all assessment deadlines.

Description:

This assessment will make use of a central narrative (case study) file, please note that this case study may be unique to your intake, as such the answers generated will be exclusive to your cohort ensuring a customized experience and supporting academic integrity initiatives.

This assessment has multiple objectives for student learning and skill(s) development:

1. This scenario will provide students with an academic-based case which is meant to:
    a. Establish an understanding of the relationship between data sets.
    b. Identify the structure of data and how record sets are formed.
2. This deliverable will afford course faculty a chance to gauge student preparedness and ability to:
    a. Apply the concept of cardinality to a database design to show amount of data connection.
    b. Build professional technical documentation for a workplace environment.
3. This assessment is part of a series of deliverables that make use of a continuing narrative, which affords students the opportunity to experience first-hand how any project can leverage expertise from multiple different fields to properly develop a functional solution.

Please refer to the *Resources* section at the end of this document for location information regarding the central narrative file (case study) to be used for completing this assessment.

Tasks:

Referring to narrative section 6*.4.1.1. "Orders Database"* in your course's case narrative you will:

1. Utilizing Microsoft VISIO, you are to leverage the content within the prescribed narrative to develop an Entity Relationship Diagram (ERD). Make use of the *'Crow's Foot Database Notation'* template available within VISIO.
    a. You will be constructing the entities [Tables] found within the schemas associated with the last digit of your student number.

Student # Last Digit	Schema
1 – 2	1 and 2 as identified in 6.4.1.1.
3 – 4	1 and 3 as identified in 6.4.1.1.
5 – 6	1 and 4 as identified in 6.4.1.1.
7 – 8	1 and 5 as identified in 6.4.1.1.
9 – 0	1 and 6 as identified in 6.4.1.1.

    b. Your ERD must include the following items:
        - All entities must be shown with their appropriate attributes and attribute values (variable type and length where applicable)
        - All Primary keys and Foreign Keys must be properly marked.
        - Differentiate between standard entities and intersection entities, utilize rounded corners on tables for intersection tables.
        - Specify minimum and maximum cardinalities using crow's foot notation.
    c. Formatting requirements:
        - Avoid unnecessarily crossing relationship lines between tables.
        - Cardinality must be clearly visible and legible, symbols for cardinality are to be lined up to the exterior of the table.
        - Align tables in a grid-like fashion when possible.
        - Attempt to maintain similar buffer space between tables.

Format Requirements:

The following requirements are enforced for this assessment.

- **Length[1] of paper:** N/A
- **Number of files:** 1
- **File Name:** See "O3 – Student Submissions Naming Convention.pdf"
- **Audience and Tone:** N/A
- **Citation Style:** APA[2] (required)
- **Title Page:** ***(10% penalty if you do not include)***
  College Name, Program Code, Course Code, Course Section, Assignment Title, Student Name, Date
- **Font Style:**
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  - Font Style: Calibri
- **Line Spacing:** 1.08pt (Microsoft Default)
- **Margins:**
  - Narrow setting (0.5")
- **Document Format:**
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  - Dropbox submission through eConestoga
  - PDF

Success Criteria:

This assessment's overall weight can be found on the *Instructional Plan (IP)* and reflected within the eConestoga grade book. Any student that discovers a conflict existing between the IP and grade book shall notify their course faculty member.

For specific evaluation standards, students shall consult the associated assessment rubric found in the *Rubrics* section of eConestoga.

- Failure to submit an assessment by the specified end date, to the correct dropbox, will result in a grade of zero (0).
- No opportunity will be provided to make up for an unsubmitted deliverable.
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- Be aware that Conestoga College's Academic Offense policy will be enforced.

Resources:

- A unique narrative has been assigned to your cohort, the narrative file for this assessment can be found in one of two of the following locations:
  - A segment of the narrative PDF containing specific sections of content will be found directly within the assessment folder through eConestoga.
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Task 4 – Schema Control and Administration (A)

(Individual work, no groups)

Due Date:

Please refer to the Instructional Plan for all assessment deadlines.

Description:

This assessment has multiple objectives for student learning and skill(s) development:

1. This scenario will provide students with a hands-on work-related case which is meant to:
    a. Reinforce an understanding as to how IT roles and technology support business functions and non-IT employees.
    b. Depict forms and approaches to data integration.
2. This deliverable will afford course faculty a chance to gauge student preparedness and ability to:
    a. To understand directions provided in a workplace setting.
    b. To work within a business setting producing work that fits the set requirements of an employer.
3. This assessment is part of a series of deliverables that make use of a continuing narrative, which affords students the opportunity to experience first-hand how any project can leverage expertise from multiple different fields to properly develop a functional solution.

Please refer to the *Resources* section at the end of this document for location information regarding the central narrative file (case study) to be used for completing this assessment.

Tasks:

Your submission for this assessment will be formatted as an informal written report responding to your employer's work request(s). You are to address the following emails while referencing the client organization's Employee Database (first used in Project 2). Obtain, or create, a copy of the Employee Database, if you have previously built the Employee Database in a previous project then you may reuse said database on this individual assessment.

From: Matt Kozi <MKozi@cbr.org>

To: You

Subject: Employee Database administration

Hey,

I'm not sure if anyone has briefed you on this, the department has been working towards standing-up an intranet site to allow select employees the ability to pull data from the Employee Database that is in your administrative portfolio. The project is meant to reduce the departments dependence on submitting data requests to you and the other Database Administrators, simplifying the process by allowing direct access to relevant by different groups of internal users.

We just wrapped up our meeting with the web developers, and before they can implement the employee page for our intranet site, they had a few observations about our employee database that we need to implement to meet data protection regulations. From what I could gather, there are a few key elements that we need to get into place now before any more work can be done on the system, as always, we must affect as little changes to the system as possible as there are a number of systems and applications already running off of the employee database and we can't afford to take it offline right now. The first thing that the dev's requested was that we needed to establish proper schemas for the database. For the schemas, we were looking at five general groupings for the tables:

- Schema 1: Include any table that has general information about the employee and their role.
- Schema 2: Include tables that have private or personal data which would be subject to a higher degree of government regulations. I don't really think we should let many people have access to the data on these tables, the last thing we need is a lawsuit.
- Facility: any non-personal data that doesn't contain address information should be dumped into this schema. It doesn't matter if the tables aren't really a perfect fit with 'facility' data, this will more-or less just be a catch all for any table we can't place inside any of the other schemas.
- Schema 4: Anything to do with contact information must be grouped together in a single schema. This schema will need to be restricted to only certain roles, there is no need for everyone in the organization to be able to see into this subset of data.
- Address: this one is self-explanatory.

You should come up with clear names for the schemas that haven't been named yet, just call them whatever makes sense. The developers for you to forward the SQL commands you used to create all the schemas and assign the existing tables to the appropriate schemas.
If I remember anything else I'll email you and let you know, good luck.

Matt Kozi
Solutions Architect, Coffee Bean Roasters
mKozi@cbr.org

From: Matt Kozi <MKozi@cbr.org>
To: You
Subject: Database accounts and user function

Thanks for looking into establishing all the database schemas and the administrator account.

We're currently preparing to build account access on the intranet site but first need you to add some user accounts to the database so we can test out the connection on our end. We haven't decided yet exactly which employees we will be granting access too though, so for the time-being, I need you to setup some generic dummy accounts for a few of the departments. Just name the generic accounts after the job roles, we will later use these as templates for actual employees.

The web development team sent me the following to forward to you:

- We will need the following roles created:
    - Human Resources, must have access to schema 1, 2, and 4. They'll be in-charge of making all updates that are necessary, so give them full access to change data.
    - Accounting, needs access to Schema 1, and the Address Schema, they'll need to pull data to know where to send paystubs and tax forms, so assign the permissions accordingly.
    - Developers, will need access to all 5 schemas. They will need full data access as well as the ability to change the structure of the database.
- Create a step-by-step guide to creating a database user [sql server authentication] with passwords. You can use any process you choose, just be sure to document how you did it. That way we can have some of the junior DBAs on staff replicate your work for specific user accounts when we're ready, we don't want to bother you with the busy work. Include a step for assigning one of the above roles to that user.

We also want to test out views, and the websites ability to pull data from them. Set up a view to produce a list of employees who have not yet completed their probation period. This should be always current, I don't want to have to wait for someone to change data in the table. You should find what you are looking for in the Roles and Employee tables.

Matt Kozi
Solutions Architect, Coffee Bean Roasters
mKozi@cbr.org

From: Christopher Nickel <cNickel@cbr.org>
To: You; mKozi@cbr.org
Subject: Issue with pulling data from the Employee Database

The web dev's just contacted me and said they can't seem to pull any data from the Employee database, I assured them that everything on your side should be fine, but they asked if you could check to see if the ODBC connection is setup. If it isn't, can you quickly set the ODBC data source in the DBMS and forward me a detailed step-by-step showing how you set it up and the parameters you set for it? Let's make sure that we are using Windows Integrated Authentication for the connection. Also, can you include a screenshot that shows your name in the Description field for the ODBC, that way if there are any issues we'll know who to check with. Thanks.

Christopher Nickel
Director of Infrastructure, Coffee Bean Roasters
cNickel@cbr.org

Format Requirements:

The following requirements are enforced for this assessment.

- **Length[1] of paper:** N/A
- **Number of files:** 1
- **File Name:** See "O3 – Student Submissions Naming Convention.pdf"
- **Audience and Tone:** N/A
- **Citation Style:** APA[2] (required)
- **Title Page:** ***(10% penalty if you do not include)***
  College Name, Program Code, Course Code, Course Section, Assignment Title, Student Name, Date
- **Font Style:**
  - Body Size: 11pt
  - Font Style: Calibri
- **Line Spacing:** 1.08pt (Microsoft Default)
- **Margins:**
  - Narrow setting (0.5")
- **Document Format:**
  - Header for each page including: Date, Course code, Student name
  - Dropbox submission through eConestoga
  - PDF

Success Criteria:

This assessment's overall weight can be found on the *Instructional Plan (IP)* and reflected within the eConestoga grade book. Any student that discovers a conflict existing between the IP and grade book shall notify their course faculty member.

For specific evaluation standards, students shall consult the associated assessment rubric found in the *Rubrics* section of eConestoga.

- Failure to submit an assessment by the specified end date, to the correct dropbox, will result in a grade of zero (0).
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- Be aware that Conestoga College's Academic Offense policy will be enforced.

Resources:

- A unique narrative has been assigned to your cohort, the narrative file for this assessment can be found in one of two of the following locations:
  - A segment of the narrative PDF containing specific sections of content will be found directly within the assessment folder through eConestoga.
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[2] For details on APA style referencing you are to visit https://apa.conestogac.on.ca/ reference page(s)

Task 5 – Data Warehouse (A)

(Individual work, no groups)

Due Date:

Please refer to the Instructional Plan for all assessment deadlines.

Description:

This assessment will make use of a central narrative (case study) file, please note that this case study may be unique to your intake, as such the answers generated will be exclusive to your cohort ensuring a customized experience and supporting academic integrity initiatives.

This assessment has multiple objectives for student learning and skill(s) development:

1. This scenario will provide students with a hands-on case which is meant to:
    a. Reinforce an understanding of the purpose of a data warehouse and how data is indexed.
    b. Apply concepts of architectures and data infrastructures.
2. This deliverable will afford course faculty a chance to gauge student preparedness and ability to:
    a. To index, build and/or extract data from a data warehouse.
    b. Describe the steps and process of ETL.
3. This assessment is part of a series of deliverables that make use of a continuing narrative, which affords students the opportunity to experience first-hand how any project can leverage expertise from multiple different fields to properly develop a functional solution.

Please refer to the *Resources* section at the end of this document for location information regarding the central narrative file (case study) to be used for completing this assessment.

Tasks:

Referring to narrative section *6.4.1.1. "Orders Database"* (Case - CBR - 6.4.1.1. – Orders Database.pdf).

The client organization wishes to better understand shipping performance based on the observable variance in shipping estimation and the actual time of arrival. To perform analysis on this data, they require a data warehouse (data mart) that will help identify critical data regarding shipping data as gathered from the Orders Database).

1) Data Mart

From: Matt Kozi MKozi@cbr.org
To: You
Subject: New Data Mart

Hello.

I thought it would be helpful to send you a summary of what we discussed during the last meeting. The higher-ups want to kick-off a new initiative that will have our Analytics team evaluate shipping performance so that we can better understand which shipping methods are falling short on delivery time expectations and to what regions/cities this is most commonly occurring. However, I do agree with what you stated during the meeting, that giving the Analyst's direct access to the Orders database was an unnecessary risk, and that providing them with a cleansed data mart would be the best choice. We had some additional meetings and everyone agrees that your data mart idea would ensure that we wouldn't need to add more users to the Orders database, and would allow us to retain full control over what data we want the Analysts to access.

As it stands, I'll need you to set up and document the new data mart for data export so that we can have some of our analyst's start to evaluate shipping performance to date. You mentioned that you needed to first document a [data warehouse] star schema layout so you'd have a reliable understanding of what data you'd need to export and after discussing with the DBA, the following information was identified for the design:

- Fact table – *ShippingEfficiency* Table which will include all relevant connections from the associated dimensional tables along with a new fact table measure which will calculate the difference in date between estdateshipped and actualdateshipped
- Dimensional table – CustomerOrder, ShipmentMethod, OrderStatus, ShippingAddress.
    - I spoke to the legal department, they notified me that we should avoid including any cost or pricing data from the CustomerOrder table, so for the Dimensional table you're setting up, skip those attributes.
    - Also, let's change the name of the table slightly so we don't get it confused with the regular CustomerOrder table in the future.

Can you build it in VISIO or something? I know it is a really basic diagram, just want it to look professional so we don't have to go back and rework things…Send me the PDF when you're done.

Matt Kozi
Solutions Architect, CBR
mKozi@cbr.org

2) Table Scripts

From: Matt Kozi MKozi@cbr.org
To: You
Subject: **URGENT: Need those table scripts**

Now that you've gotten the model built, I need you to move onto writing out the script to build the tables for our new data mart.

P.S. Also, I really hate to bother you with this again, but don't forget to set the composite key for the fact table, last time you skipped this and it became a big mess… Additionally, while you did set the constraints last time you forgot to ensure you didn't allow updates or deletes through the connections. We need the key connections, but referential integrity obviously isn't going to work here. So just…follow instructions this time? Okay?

Forward the .SQL file to me so I can pass it off to our DBA.

Matt Kozi
Solutions Architect, CBR
mKozi@cbr.org

3) Explain why referential integrity isn't a major focus of the FACT table within a data mart based on the data warehouse star schema? What issues would arise if update and delete were enforced within the key CONSTRAINT(s)?
   This answer can be included on the PDF Visio file (PDF) of the dimensional table.

4) Sample Data

From: Matt Kozi MKozi@cbr.org
To: You
Subject: Wrapping up

Can you provide a sample script for the data? Just 5-lines of data per table would suffice. That way we can test this out before we pass it along. I know, I know, not the most exciting work, but hey, look at it this way. You're almost done the project!

Btw, you can just use data from the existing orders database you originally built a few months back if that's easier, else, just make some new data by hand or through generatedata.com. Doesn't matter to me.

Just toss these commands to the end of the .SQL file from earlier, submit it and head home, thanks.

Matt Kozi
Solutions Architect, CBR
mKozi@cbr.org

Format Requirements:

The following requirements are enforced for this assessment.

- **Length[1] of paper:** N/A
- **Number of files:** 2 (1 pdf, 1 sql)
- **File Name:** See "O3 – Student Submissions Naming Convention.pdf"
- **Audience and Tone:** N/A
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- **Line Spacing:** 1.08pt (Microsoft Default)
- **Margins:**
  - Narrow setting (0.5")
- **Document Format:**
  - Header for each page including: Date, Course code, Student name
  - Dropbox submission through eConestoga
  - PDF

Submission Parameters:

1) .pdf file: Question 1, 3
2) .sql file: Question 2, 4

Success Criteria:

This assessment's overall weight can be found on the *Instructional Plan (IP)* and reflected within the eConestoga grade book. Any student that discovers a conflict existing between the IP and grade book shall notify their course faculty member.

For specific evaluation standards, students shall consult the associated assessment rubric found in the *Rubrics* section of eConestoga.

- Failure to submit an assessment by the specified end date, to the correct dropbox, will result in a grade of zero (0).
- No opportunity will be provided to make up for an unsubmitted deliverable.
- It is the student's responsibility to ensure that their work has been submitted through eConestoga, ontime, to the correct course and in the correct folder.
- Be aware that Conestoga College's Academic Offense policy will be enforced.

Resources:

- A unique narrative has been assigned to your cohort, the narrative file for this assessment can be found in one of two of the following locations:
  - A segment of the narrative PDF containing specific sections of content will be found directly within the assessment folder through eConestoga.
  - (1) Narrative (PDF) file will be available within the *Supplementary Materials* module through eConestoga.
- The *Writing Services center* provides writing support through https://lib.conestogac.on.ca/writing-services
  - Downloadable PDF instructions on making an appointment with Conestoga College's Writing Services are located here: https://lib.conestogac.on.ca/ld.php?content_id=35144762

[1] Page count does not include; cover page, table of content, large format images, or bibliography

[2] For details on APA style referencing you are to visit https://apa.conestogac.on.ca/ reference page(s)