DATABASE APPLICATIONS
(240)

REGIONAL – 2019

Production:

Printout 1: Sales Table   _____ (50 points)

Printout 2: Daily Sales Query   _____ (35 points)

Printout 3: Daily Sales Report   _____ (40 points)

Printout 4: Customer Report   _____ (40 points)

TOTAL POINTS   _____ *(165 points)*

Failure to adhere to any of the following rules will result in disqualification:
1. **Contestant must hand in this test booklet and all printouts. Failure to do so will result in disqualification.**
2. **No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests or facsimile (handwritten, photocopied, or keyed) are allowed in the testing area.**
3. **Electronic devices will be monitored according to ACT standards.**

No more than ten (10) minutes orientation
No more than ninety (90) minutes testing time
No more than ten (10) minutes wrap-up

GENERAL INSTRUCTIONS

1. Make certain this test booklet contains Jobs 1-4.

2. Your name, initials, and school should *not* appear on any work you submit. Instead, type your contestant number everywhere xx-xxxx-xxxx appears.

3. If you finish before the end of the testing time, notify the administrator of the contest. Time may be a factor in determining a winner when there is a tie score.

4. When turning in your completed work, order the printed pages by job number, and place your scoring sheet on top of all of your jobs.

5. Save all work with your contestant number on the flash drive provided by the contest administrator.

DATABASE APPLICATIONS
SCORING SHEET

Unless indicated otherwise, student receives all points or none.	Points Possible	Points Earned
Printout 1 – Sales Table *(50 points maximum)*		
Report printed landscape and all data is visible.	**3**	
Table designed as instructed (3 points per field name)	**18**	
Sales Date field is in Short Date format (xx/xx/xxxx)	**3**	
Sales Time field is in Medium Time format (xx:xx XM)	**3**	
Sales Quantity has only one decimal position	**2**	
Sales records entered correctly (3 points per record)	**21**	
Data Entry/Proofreading Errors -1 point each error (max -10 points)		
Subtotal	**50**	
Printout 2 – Relationship Report *(35 points maximum)*		
One-to-Many relationships created (10 points each)	**20**	
Referential integrity enforced (5 points each)	**10**	
Printed with all three tables fully visible.	**5**	
Subtotal	**35**	
Printout 3 – Daily Sales Query *(40 points maximum)*		
Designed as instructed (2 points per field)	**16**	
Sales from 3/25/2019	**14**	
Sorted by Last Name (ascending)	**5**	
Printed in landscape orientation, all data shows, 1 page	**5**	
Data Entry/Proofreading Errors -1 point each error (max -10 points)		
Subtotal	**40**	
Printout 4 – Daily Sales Report *(40 points maximum)*		
Title is Daily Sales Report xx-xxxx-xxxx	**2**	
Subtitle is date of the report	**4**	
Correct fields are included in the report (2 points each)	**14**	
Sorted by Customer Last Name ascending	**5**	
Line above each customer record	**5**	
Field names spaced appropriately	**5**	
Printed in portrait orientation, 1 page, all fields fully visible	**5**	
Data Entry/Proofreading Errors -1 point each error (max -10 points)		
Subtotal	**40**	
Total Points Earned	**165**	

PROJECT INSTRUCTIONS

Project: Suds Your Duds offers dry cleaning facility and drop off laundry service. Suds Your Duds has recently had a change in ownership and the new owner is working on improving the laundry. You have been tasked to develop a database to help make business decisions.

You need to create a database to keep track of all customers and their purchasing habits. Create a database named **Regional-xx-xxxx-xxxx**, and save it as directed by the administrator.

Job 1a: Customer Table
1. Create the table named **Customers xx-xxxx-xxxx** shown below. Use the same field names and assign the best data type for each field. Customer ID is the primary key. Enter all records shown below:

Customer ID	Last Name	First Name	Household Size	Email
180101001	Thompson	Willow	6	wthompson@myemail.com
180101002	Cullen	Hunter	2	hunterc@email.com
180101003	Xu	Zhang Wei	3	ZWX@emailserver.com
180101004	Puri	Saanvi	1	Saanvi.puri@email.com
180101005	Jones	Travis	3	tjones@myemail.com
180101006	Skelton	Nelly	3	nskelton@email.com

Job 1b: Service Table
1. Create a table named **Service xx-xxxx-xxxx** shown below. Use the same field names and assign the best data type for each field. Service ID is the primary key.
2. Service Price should be formatted as currency.
3. Service Unit should be a text box.
4. Enter all records shown below:

Service ID	Service Description	Service Price	Service Unit
1	Wash Fold Dry	$1.55	lb
2	Two-piece Suit	$12.00	each
3	Dress Shirt	$3.50	each
4	Dress	$7.50	each
5	Suit Jacket	$5.50	each
6	Coat	$6.00	each
7	Comforter – Wash	$2.00	lb
8	Comforter – Dry Clean	$15.00	each

Job 1c: Sales Table (Printout #1)

1. Create a table named Sales xx-xxxx-xxxx shown below. Use the same field names and assign the best data type for each field. Sales ID is the primary key.
2. Use the same name/data type for Customer ID and Service ID from their original tables.
   a. Create Lookup List Box based on the Customer Table (for Customer ID field)
      i. Bound Column = 1
      ii. Columns = 3
      iii. Column Heads = Yes
   b. Create Lookup List Box based on the Service Table (for Service ID field)
      i. Bound Column = 1
      ii. Columns = 2
      iii. Column Heads = Yes
3. Enter all records shown below:

Sales ID	Sales Date	Sales Time	Customer ID	Service ID	Sales Quantity
1	03/23/2019	7:20 AM	180101001	3	2.0
2	03/23/2019	10:51 AM	180101004	2	5.0
3	03/23/2019	1:02 PM	180101002	1	25.5
4	03/25/2019	2:05 PM	180101001	1	15.8
5	03/25/2019	5:30 PM	180101005	8	4.0
6	03/25/2019	5:45 PM	180101006	6	14.0
7	03/29/2019	7:04 PM	180101003	1	32.3

4. Sort by Customer ID (ascending).
5. Print the results in landscape orientation. All data should be visible on one page.

Job 2: Create a Permanent Relationship (Printout #2)

1. Create a permanent relationship between Customer ID in the Customer and Sales tables.
   a. Join Customer ID to Customer ID
      i. Enforce referential integrity and accept the default Join Type.

2. Create a permanent relationship between Service and Sales tables.
   a. Join Service ID to Service ID
      i. Enforce referential integrity and accept the default Join Type.

3. Resize/move tables so each table name and each field is fully visible in the relationship window.

4. Create and Print the Relationship Report.

Job 3: Daily Sales Query (Printout #3)

1. Create a query named Daily Sales Query xx-xxxx-xxxx using the tables/fields listed below:
   a. Sales Table: Sales ID, Sales Date and Sales Quantity
   b. Customers Table: First Name and Last Name
   c. Service Table: Service Description, Service Price, Service Unit
2. Restrict the results to only those sales that occurred on 03/25/2019.
3. Sort (ascending) by Last Name.
4. Print the results (showing ALL fields) in landscape orientation. All data should be visible on one page.

Job 4: Daily Sales Report (Printout #4)
1. Create a stepped report, grouped by Customer, based on the Daily Sales Query xx-xxxx-xxxx as shown below. Your report format, such as borders, colors, and placement of fields may be different, but it must:
   a. Have the same title
   b. Have the same sub-title (use the sales date field to place the date in the sub-title)
   c. Show the same fields
   d. Sort by Customer Last Name ascending
   e. Insert a line above each name
   f. Have field widths/placement adjusted so all data is visible on one page in Portrait orientation

Daily Sales Report xx-xxxx-xxxx
3/25/2019

First Name	Last Name	Sale ID	Service Description	Quantity	Service Price	Service Unit
Travis	Jones					
		5	Comforter - Dry Clean	4.0	$15.00	each
Nelly	Skelton					
		6	Coat	14.0	$6.00	each
Willow	Thompson					
		4	Wash Fold Dry	15.8	$1.55	lb

2. Save the report as Daily Sales Report xx-xxxx-xxxx.
3. Print the report.