

DATABASE APPLICATIONS

(240)

REGIONAL – 2020

Production:

Printout 1: Candidates Table	_____	(70 points)
Printout 2: Job Openings Table	_____	(75 points)
Printout 3: Relationship Report	_____	(20 points)
Printout 4: Top Candidate Query	_____	(55 points)
Printout 5: Top Candidate Contact Report	_____	(70 points)
<i>TOTAL POINTS</i>	_____	<i>(290 points)</i>

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

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**DATABASE APPLICATIONS
SCORING SHEET**

<i>Unless indicated otherwise, student receives all points or none.</i>	Points Possible	Points Earned
Printout 1 – Candidates Table (70 points maximum)		
Designed as instructed (5 points per field)	40	
Sorted by Applied Position (ascending)	10	
Cell Phone number has (xxx) xxx-xxxx input mask applied.	10	
Printed using best fit in landscape orientation (all data shows, 1 page)	10	
Misspellings or wrong data entered -1/2 pt per occurrence up to -10 max.		
Printout 2 – Job Openings Table (75 points maximum)		
Imported spreadsheet fields correctly (9 fields at 5 points a field).	45	
Added additional field as instructed (5 points per field)	5	
Formatted correctly (should look like example)	15	
Printed in landscape orientation (2 pages)	10	
Misspellings or wrong data entered -1/2 pt per occurrence up to -10 max. Should also be 0 points for imported spreadsheet correctly.		
Printout 3 – Relationship Report (20 points maximum)		
Title is Relationships for Region xx-xxxx-xxxx.	5	
One-to-Many relationship shown between Job Opening ID and Applied Position fields.	15	
Printout 4 – Top Candidate Query (55 points maximum)		
Title is Top Candidate Query XX-XXXX-XXXX	5	
Correct fields are included in the report (7 fields x 2 points each)	14	
Sorted by Job Opening ID (ascending) then by Total Score (descending)	10	
The Total Score values are correct (see answer key) (all or nothing)	10	
Only total score values that are 7 or greater appear in the query.	10	
Printed in landscape orientation, 1 page, all fields fully visible	6	
Printout 5 – Top Candidate Contact Report (70 points maximum)		
Title is Top Candidate Contact Report XX-XXXX-XXXX	5	
Correct fields are included in the report (6 fields x 2 points each)	12	
Report is grouped by Job Name.	10	
Correct records are displayed on the report (7 records x 4 points each)	28	
All field titles and entries can be completely seen (no hidden or truncated)	10	
Printed in landscape orientation, 1 page.	5	
Total Points Earned	290	

General Instructions

You have been hired as a database specialist and will be assisting on various activities throughout Professional Business Associates, located at 5454 Cleveland Avenue, Columbus, Ohio 43231. Professional Business Associates provides accounting and other financial services for clients.

1. You will have 90 minutes to complete your work.
2. Check that you have all the test pages.
3. Your name, initials, and school should *not* appear on any work you submit. Instead, type your contestant number everywhere XX-XXXX-XXXX appears.
4. 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.
5. When turning in your completed work, order the printed pages by job number, and place your scoring sheet on top of all your jobs. **Turn in all pages printed including incorrect printouts** (draw a line through each incorrect printout and place it at the back of the group).

Project: The human resources department needs a database created to manage open job postings and prospective candidates. They have sent to you a spreadsheet that has the current job openings and have shared information about candidates for two of those postings. In this project you will create a candidate database, queries and reports to support the HR department.

Create a database named **Region-XX-XXXX-XXXX**, and save it as directed by the administrator.

Job 1a: Current Openings

1. Create a table by importing the spreadsheet named **Current Openings** into a Access. Accept the recommended field names. The first row does contain headings. **Job Opening ID** is indexed and no duplicates. Set Job Opening ID as primary key. Name the table **Current Openings xx-xxxx-xxxx**.
2. Insert a new field at the end of the table named **Position Filled** and make it a yes/no data type. Save the table.

Job 1b: Current Candidates

3. HR provided the data shown below. Enter the information into a table named **Candidates xx-xxxx-xxxx**. Use the same field names and assign the best data type for each field. **CandidateID** is the primary key. The **ExSkill** abbreviation stands for experience with a required skill for the position. This is completed by the candidate during the application process. These fields are calculated to determine the top candidates that will be called in for interviews.
4. **Data Types:**
 - a. Candidate ID – number (primary field)
 - b. Cell Number – text (input mask for phone number (xxx) xxx-xxxx)
 - c. Applied Position – number
 - i. Field Size = Double
 - ii. Format = general number
 - d. ExSkill 1, 2, 3 – yes/no
5. Enter all records shown below:

Candidate ID	First Name	Last Name	Cell Number	Applied Position	ExSkill 1	ExSkill 2	ExSkill 3
114	Darnell	Yu	(393) 312-6033	41	Y		Y
115	Keaton	Pollard	(393) 228-5483	41	Y	Y	Y
116	Siena	Morrison	(863) 692-0343	44		Y	Y
117	Talan	Roman	(393) 675-9929	44	Y	Y	
118	Ryann	Wheeler	(393) 548-5825	44	Y		Y
119	Athena	Haney	(863) 939-7612	44		Y	Y
120	Barrett	Dawson	(863) 733-8085	44			Y
121	Melina	Luna	(393) 657-0519	41	Y	Y	
122	Adriel	Hooper	(393) 573-7052	41		Y	Y
123	Alice	Cruz	(393) 804-4679	44	Y	Y	Y
124	Adrianna	Molina	(393) 263-2358	41	Y		Y
125	Darian	Pineda	(393) 276-3457	44	Y		

6. **Sort Table** by Applied Position, ascending (A-Z).

Job 1c: Table Printing (two prints)

7. Print **Candidates xx-xxxx-xxxx** in landscape orientation with all fields showing.
8. Adjust the Job Openings file as follows:
 - a. Set the **column width** for Description, Preferred Experience 1, Preferred Experience 2 and Preferred Experience 3 to **15**.
 - b. Set the rest of the columns to fit to contents.
9. Print **Current Openings xx-xxxx-xxxx** in landscape orientation (will be two pages).

Job 2: Create a Permanent Relationship (one print)

1. Create a permanent relationship between Job Opening ID and Applied Position in the tables.
2. Enforce referential integrity.
3. Print the Relationship Report.
4. Save the Report as Relationship for Region xx-xxxx-xxxx.

Job 3: Top Candidate Query (one print)

1. Create a query named **Top Candidate Query XX-XXXX-XXXX** using the tables/fields listed below:

<u>Current Openings</u>	<u>Candidates</u>
Job Opening ID	Candidate ID
Job Name	ExSkill 1
	ExSkill 2
	ExSkill 3

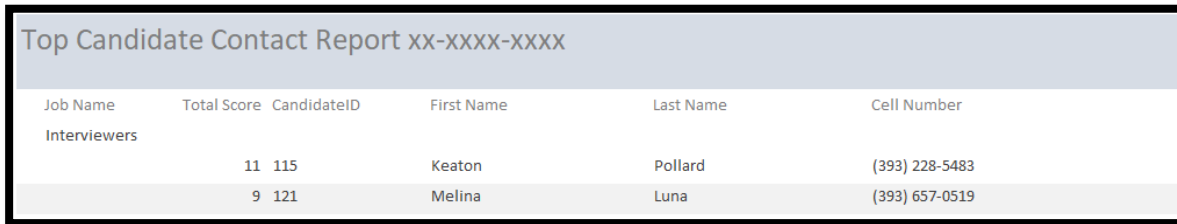
2. Create a Total Score Column
 - a. Use Builder in the Field Column to insert this calculation which weights the different experiences.
 - i. Total Score: $(-5*[ExSkill 1]) + (-4*[ExSkill 2]) + (-2*[ExSkill 3])$
3. Sort first by Job ID (ascending) then by Total Score descending order.
4. Add criteria to the Total Score field to only show records that have a value of 7 or greater.
5. Run the Query.
6. Print the results in landscape orientation. All data should be visible on one page.

Job 4: Top Candidate Contact Report (one print)

1. Create a report named **Top Candidate Contact Report XX-XXXX-XXXX** using the Report Wizard.
2. Add the fields shown below:

<u>Top Candidate Query</u>	<u>Candidates Table</u>
Job Name	First Name
Candidate ID	Last Name
Total Score	Cell Phone

3. Group by Job Name, Sort by Total Score (descending), save as Top Candidate Contact Report xx-xxxx-xxxx.
4. Open the Design View to resize all the fields so that they can be easily read in a Landscape Orientation. Should look like this (report is not shown in its entirety):



Job Name	Total Score	CandidateID	First Name	Last Name	Cell Number
Interviewers	11	115	Keaton	Pollard	(393) 228-5483
	9	121	Melina	Luna	(393) 657-0519

5. Print the report in landscape orientation, should be a 1-page report.