

**ITEC 3335**  
**Database Development**  
**Fall 2019**  
**Suggested Solution to Homework #1**

(2)

The table Rank, design view:

The screenshot shows the design view of a table named 'Rank'. The table structure is as follows:

Field Name	Data Type	Description (Optional)
Rank	Short Text	
IsTenureTrack	Yes/No	

The 'Field Properties' window is open for the 'Rank' field, showing the following settings:

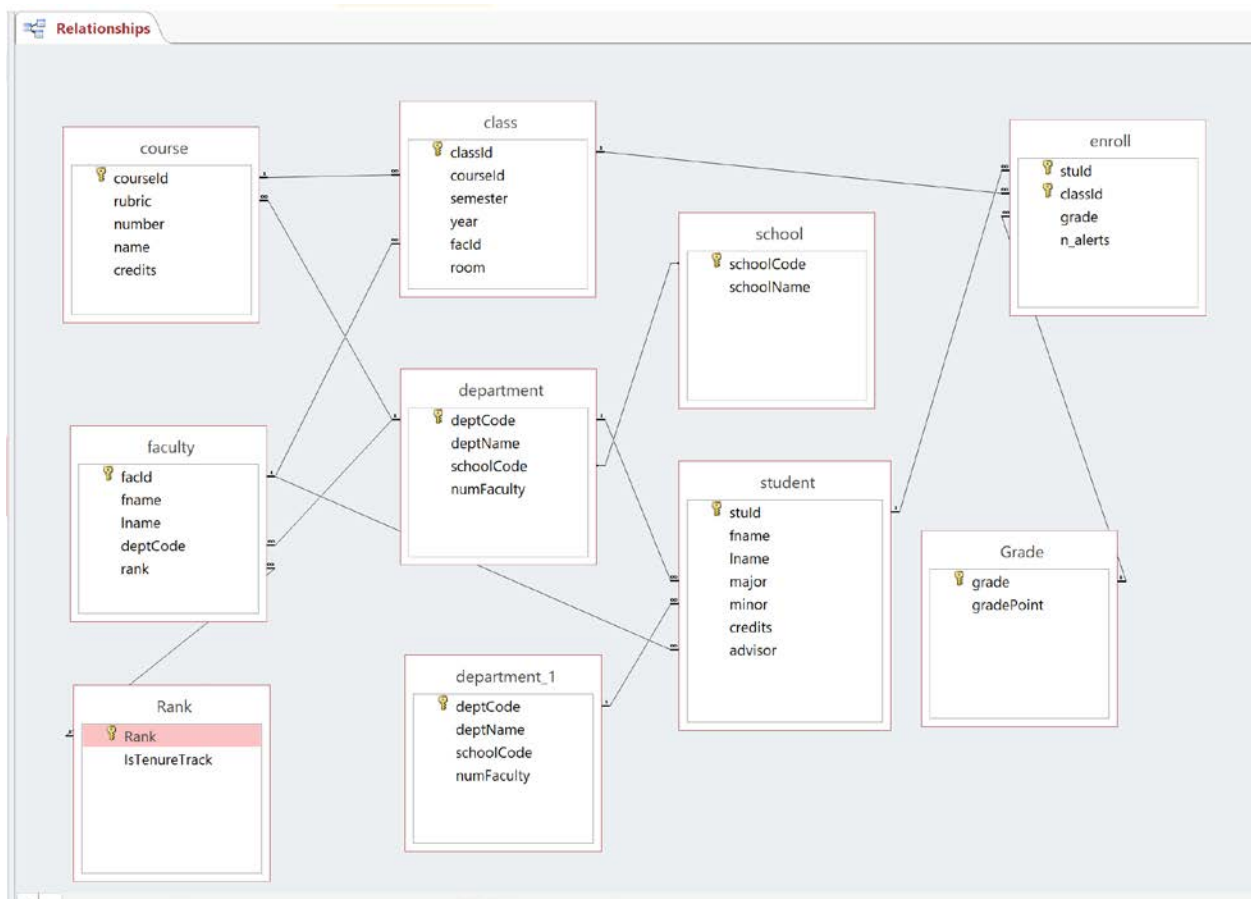
Property	Value
Field Size	25
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Allow Zero Length	Yes
Indexed	Yes (No Duplicates)
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

The table Rank, datasheet view:

Rank	IsTenureTrack	Click to Add
Adjunct Lecturer	<input type="checkbox"/>	
Assistant Professor	<input checked="" type="checkbox"/>	
Associate Professor	<input checked="" type="checkbox"/>	
Lecturer	<input type="checkbox"/>	
Professor	<input checked="" type="checkbox"/>	
Senior Lecturer	<input type="checkbox"/>	
Visiting Professor	<input type="checkbox"/>	
*		

The Relationship diagram:



(3) (a)

Query A

student

\*

- 🔑 stuld
- fname
- lname
- major
- minor
- credits
- advisor

	Field: fname	lname	major	
	Table: student	student	student	
	Sort:			
	Show: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Criteria:		= 'ITEC'	
	or:			

(b)

**Query B**

Field:	facId	fName	lName	deptCode	deptName	
Table:	faculty	faculty	faculty	department	department	
Sort:						
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:				= 'CSCI'		
or:				= 'ITEC'		

(c)

**Query C**

Field:	d: facId	faculty: faculty.[fName] & ' ' & [lName]	department: deptName	school: schoolName	schoolCode
Table:	faculty		department	school	school
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:					'CSE' Or 'HSH'
or:					

(d)

**Query D**

ER Diagram for Query D:

- Rank** (Primary Key: Rank)
  - Attributes: Rank, IsTenureTrack
- faculty** (Primary Key: factd)
  - Attributes: factd, fname, lname, deptCode, rank
- class** (Primary Key: classid)
  - Attributes: classid, courseId, semester, year, factd
- course** (Primary Key: courseId)
  - Attributes: courseId, rubric, number, name, credits

Relationships:

- Rank (1) to faculty (1)
- faculty (1) to class (1)
- class (1) to course (1)

Field:	factd	IsTenureTrack	rank	rubric	number	name	semester	year
Table:	faculty	Rank	faculty	course	course	course	class	class
Sort:				Ascending	Ascending			
Show:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		=Yes						
or:								

(e)

**Query E**

ER Diagram for Query E:

- school** (Primary Key: schoolCode)
  - Attributes: schoolCode, schoolName
- department** (Primary Key: deptCode)
  - Attributes: deptCode, deptName, schoolCode, numFaculty
- student** (Primary Key: stuld)
  - Attributes: stuld, fname, lname, major, minor, credits, advisor

Relationships:

- school (1) to department (1)
- department (1) to student (1)

Field:	schoolCode	school: schoolName	department: deptName	major student: [fname] & ' ' & [lname]
Table:	school	school	department	
Sort:				
Show:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:	[School code (HSH, CSE, BUS or EDU):]			
or:				