Generated using <u>SQL Data Dictionary</u> demo version.

.

**examination** 

# <u>Tables:</u>

dbo.choices (108 rows)	1
dbo.course (4 rows)	1
dbo.course_topic (6 rows)	2
dbo.department (2 rows)	2
dbo.dept_course (4 rows)	3
dbo.exam (4 rows)	3
dbo.instructor (3 rows)	4
dbo.question (57 rows)	5
dbo.question_exam (40 rows)	5
dbo.st_exam_question (20 rows)	6
dbo.student (3 rows)	6
dbo.student_grade (3 rows)	7
Procedures:	
dbo.c_Topic	
dbo.crs_delete	
dbo.crs_insert	
dbo.crs_select	
dbo.crs_update	
dbo.deleteIns	
dbo.dept_delete	
dbo.dept_insert	11
dbo.dept_select	11
dbo.dept_update	11
dbo.deptname	11
dbo.exam_correction	12
dbo.exam_generation	12
dbo.exam_question	12
dbo.ins_crs	13
dbo.insert_student_course	13
dbo.insertIns	13
dbo.INSQuestion	14
dbo.questDelete	14
dbo.select_choice	15
dbo.select_que	15
dbo.select_st_course	15

dbo.selectIns	
dbo.selectInsWithId	16
dbo.selectqueChoices	16
dbo.st_answer	16
dbo.st_grad	17
dbo.std_delete	17
dbo.std_insert	17
dbo.std_select	18
dbo.std_update	18
dbo.student_answers	18
dbo.topic_delete	19
dbo.topic_insert	19
dbo.topic_select	19
dbo.topic_update	20
dbo.update_course_student	20
dbo.updateAnswer	20
dbo.updatechoice	20
dbo.updateIns	21
dbo.updateMark	21
dbo.updatequesCourse	21
dho undateQuestion	22

## **Tables:**

# Table dbo.choices (108 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	ques_id	int			
PK	choice_num	varchar(10)			
	choice_desc	varchar(80)		Χ	

#### **Indexes:**

PK\_choices (Primary Key) (Clustered)

ques\_id choice\_num

#### **References:**

**dbo.question** (ques\_id)

### Used by:

**Procedure dbo.INSQuestion** 

Procedure dbo.questDelete

Procedure dbo.select\_choice

Procedure dbo.selectqueChoices

Procedure dbo.updatechoice

Procedure dbo.updateQuestion

# **Table dbo.course** (4 rows)

	Column	Data Type	Identity	Nullable	Default
PK	crs_id	int			
	crs_name	varchar(20)		Χ	
	duration	int		Χ	
FK	ins_id	int		X	

#### Indexes:

PK\_course (Primary Key) (Clustered)

crs\_id

#### References:

**dbo.instructor** (ins\_id)

# Referenced by:

dbo.course\_topic (crs\_id)

dbo.dept\_course (crs\_id)

dbo.exam (crs\_id)

**dbo.question** (crs\_id)

dbo.student\_grade (crs\_id)

#### Used by:

Procedure dbo.c\_Topic

Procedure dbo.crs\_delete

Procedure dbo.crs\_insert

Procedure dbo.crs\_select

Procedure dbo.crs\_update

Procedure dbo.exam\_generation

Procedure dbo.ins\_crs

Procedure dbo.insert\_student\_course

**Procedure dbo.INSQuestion** 

Procedure dbo.st\_grad

Procedure dbo.topic\_insert

Procedure dbo.update\_course\_student

Procedure dbo.updatequesCourse

Procedure dbo.updateQuestion

# **Table dbo.course\_topic** (6 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	crs_id	int			
PK	topic	varchar(30)			

#### **Indexes:**

PK\_course\_topic (Primary Key) (Clustered)

crs\_id topic

#### **References:**

dbo.course (crs\_id)

#### Used by:

Procedure dbo.c\_Topic

Procedure dbo.topic\_delete

 ${\bf Procedure\ dbo.topic\_insert}$ 

Procedure dbo.topic\_select

Procedure dbo.topic\_update

# **Table dbo.department** (2 rows)

	Column	Data Type	Identity	Nullable	Default
PK	dept_id	int			
	dept_name	varchar(10)		Χ	
FK	mgr_id	int		Χ	

#### **Indexes:**

PK\_department (Primary Key) (Clustered)

dept\_id

#### References:

dbo.instructor (mgr\_id -> ins\_id)

## Referenced by:

dbo.dept\_course (dept\_id)

dbo.instructor (dept\_id)

dbo.student (dept\_id)

## Used by:

Procedure dbo.crs\_insert

Procedure dbo.crs\_update

Procedure dbo.dept\_delete

Procedure dbo.dept\_insert

Procedure dbo.dept\_select

Procedure dbo.dept\_update

Procedure dbo.insertIns

Procedure dbo.std\_insert

Procedure dbo.updateIns

# **Table dbo.dept\_course** (4 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	dept_id	int			
PK, FK	crs_id	int			

## Indexes:

PK\_dept\_course (Primary Key) (Clustered)

dept\_id crs\_id

## References:

dbo.course (crs\_id)

dbo.department (dept\_id)

### Used by:

Procedure dbo.crs\_delete

Procedure dbo.crs\_insert

Procedure dbo.crs\_update

## Table dbo.exam (4 rows)

	Column	Data Type	Identity	Nullable	Default
PK	exam_id	int	Χ		
FK	crs_id	int		Х	
	duration	int		Χ	120

### **Indexes:**

PK\_exam (Primary Key) (Clustered)

exam\_id

### References:

dbo.course (crs\_id)

### Referenced by:

dbo.question\_exam (exam\_id)

dbo.st\_exam\_question (exam\_id)

## Used by:

Procedure dbo.exam\_correction

Procedure dbo.exam\_generation

Procedure dbo.st\_answer

# **Table dbo.instructor** (3 rows)

	Column	Data Type	Identity	Nullable	Default
PK	ins_id	int			
	ins_name	varchar(20)		Χ	
	salary	int		Χ	
	address	varchar(30)		Χ	
FK	dept_id	int		Χ	

#### **Indexes:**

PK\_instructor (Primary Key) (Clustered)

ins\_id

#### References:

dbo.department (dept\_id)

### Referenced by:

**dbo.course** (ins\_id)

dbo.department (mgr\_id -> ins\_id)

### Used by:

Procedure dbo.crs\_insert

Procedure dbo.crs\_update

Procedure dbo.deleteIns

Procedure dbo.dept\_insert

Procedure dbo.insertIns

Procedure dbo.selectIns

Procedure dbo.selectInsWithId

Procedure dbo.updateIns

## **Table dbo.question** (57 rows)

	Column	Data Type	Identity	Nullable	Default
PK	ques_id	int	Х		
	type	varchar(20)		Χ	
	description	varchar(100)		Χ	
	model_answer	varchar(1)		Χ	
	mark	int		Χ	
FK	crs_id	int		Х	

#### **Indexes:**

**PK\_question** (Primary Key) (Clustered)

ques\_id

#### References:

dbo.course (crs\_id)

# Referenced by:

**dbo.choices** (ques\_id)

dbo.question\_exam (ques\_id)

dbo.st\_exam\_question (ques\_id)

### Used by:

Procedure dbo.exam\_correction

Procedure dbo.exam\_generation

Procedure dbo.exam\_question

**Procedure dbo.INSQuestion** 

Procedure dbo.questDelete

Procedure dbo.select\_choice

Procedure dbo.select\_que

Procedure dbo.selectqueChoices

Procedure dbo.updateAnswer

Procedure dbo.updateMark

Procedure dbo.updatequesCourse

Procedure dbo.updateQuestion

# **Table dbo.question\_exam** (40 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	exam_id	int			

PK, FK ques id	int		

#### **Indexes:**

PK\_question\_exam (Primary Key) (Clustered)

exam\_id ques\_id

#### **References:**

dbo.exam (exam\_id)
dbo.question (ques\_id)

### Used by:

Procedure dbo.exam\_generation

Procedure dbo.exam\_question

Procedure dbo.questDelete

Procedure dbo.st\_answer

# Table dbo.st\_exam\_question (20 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	st_id	int			
PK, FK	exam_id	int			
PK, FK	ques_id	int			
	st_answer	varchar(10)		Х	

#### Indexes:

PK\_st\_exam\_question (Primary Key) (Clustered)

st\_id exam\_id ques\_id

#### **References:**

dbo.exam (exam\_id)
dbo.question (ques\_id)
dbo.student (st\_id)

## Used by:

Procedure dbo.exam\_correction

Procedure dbo.st\_answer

Procedure dbo.student\_answers

# Table dbo.student (3 rows)

	Column	Data Type	Identity	Nullable	Default
PK	st_id	int			
	st_fname	varchar(20)		Χ	
	st_Iname	varchar(20)		Χ	
	address	varchar(30)		Х	
	age	int		Х	

FK	dept id	int	X	

#### Indexes:

PK\_student (Primary Key) (Clustered)

st\_id

#### **References:**

dbo.department (dept\_id)

## Referenced by:

dbo.st\_exam\_question (st\_id)

dbo.student\_grade (st\_id)

## Used by:

Procedure dbo.deptname

Procedure dbo.exam\_correction

Procedure dbo.insert\_student\_course

Procedure dbo.select\_st\_course

Procedure dbo.st\_answer

Procedure dbo.std\_delete

Procedure dbo.std\_insert

Procedure dbo.std\_select

Procedure dbo.std\_update

Procedure dbo.update\_course\_student

# **Table dbo.student\_grade** (3 rows)

	Column	Data Type	Identity	Nullable	Default
PK, FK	st_id	int			
PK, FK	crs_id	int			
	grade	int		Х	

## Indexes:

PK\_student\_grade (Primary Key) (Clustered)

st\_id crs\_id

## **References:**

dbo.course (crs\_id)

dbo.student (st\_id)

### Used by:

Procedure dbo.exam\_correction

Procedure dbo.ins\_crs

Procedure dbo.insert\_student\_course

Procedure dbo.select\_st\_course

Procedure dbo.st\_answer

Procedure dbo.st\_grad

Procedure dbo.update\_course\_student

# **Procedures:**

# Procedure dbo.c\_Topic

Parameter	Data Type	Default	Is Output
@crs_id	int		

### **Result:**

Column	Data Type	Nullable
topic	varchar(30)	

#### **Uses:**

Table dbo.course

Table dbo.course\_topic

# Procedure dbo.crs\_delete

Parameter	Data Type	Default	Is Output
@id	int		

#### Result:

Column	Data Type	Nullable
(No column name)	varchar(17)	

### **Uses:**

Table dbo.course

Table dbo.dept\_course

# **Procedure dbo.crs\_insert**

Parameter	Data Type	Default	Is Output
@id	int		
@name	varchar(10)		
@hours	int		
@ins_id	int		
@dept_id	int		

#### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(21)	

#### **Uses:**

Table dbo.course

**Table dbo.department** 

Table dbo.dept\_course

Table dbo.instructor

## Procedure dbo.crs\_select

Parameter	Data Type	Default	Is Output
@id	int		

Column	Data Type	Nullable
crs_id	int	
crs_name	varchar(20)	X
duration	int	Х
ins_id	int	Х

### **Uses:**

Table dbo.course

# **Procedure dbo.crs\_update**

Parameter	Data Type	Default	Is Output
@id	int		
@name	varchar(20)		
@hours	int		
@ins_id	int		
@dept_id	int		

#### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(21)	

### **Uses:**

Table dbo.course

**Table dbo.department** 

Table dbo.dept\_course

Table dbo.instructor

# **Procedure dbo.deleteIns**

Parameter	Data Type	Default	Is Output
@id	int		

## Result:

Column	Data Type	Nullable
(No column name)	varchar(33)	

## Uses:

Table dbo.instructor

# Procedure dbo.dept\_delete

	Parameter	Data Type	Default	Is Output
(	@id	int		

### **Uses:**

## Table dbo.department

# Procedure dbo.dept\_insert

Parameter	Data Type	Default	Is Output
@dept_id	int		
@dept_name	varchar(100)		
@mangr_id	int		

#### Result:

Column	Data Type	Nullable
(No column name)	varchar(18)	

### **Uses:**

Table dbo.department

Table dbo.instructor

# Procedure dbo.dept\_select

Parameter	Data Type	Default	Is Output
@id	int		

### Result:

Column	Data Type	Nullable
dept_id	int	
dept_name	varchar(10)	Χ
mgr_id	int	X

## **Uses:**

Table dbo.department

# Procedure dbo.dept\_update

Parameter	Data Type	Default	Is Output
@id	int		
@name	varchar(20)		
@mgr_id	int		

## Result:

Column	Data Type	Nullable
(No column name)	varchar(21)	

#### **Uses:**

Table dbo.department

# **Procedure dbo.deptname**

Parameter	Data Type	Default	Is Output
@deptNum	int		

Column	Data Type	Nullable
st_id	int	
st_fname	varchar(20)	X
st_Iname	varchar(20)	Χ
address	varchar(30)	Х
age	int	Х
dept_id	int	Х

#### Uses:

Table dbo.student

# **Procedure dbo.exam\_correction**

Parameter	Data Type	Default	Is Output
@exam_id	int		
@st_name	varchar(20)		

### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(13)	

#### **Uses:**

Table dbo.exam

Table dbo.question

Table dbo.st\_exam\_question

Table dbo.student

Table dbo.student\_grade

# Procedure dbo.exam\_generation

Parameter	Data Type	Default	Is Output
@crs_name	varchar(20)		
@tf	int		
@mcq	int		
@duration	int		

#### **Uses:**

Table dbo.course

Table dbo.exam

Table dbo.question

Table dbo.question\_exam

# **Procedure dbo.exam\_question**

Parameter	Data Type	Default	Is Output
@exam_id	int		

Column	Data Type	Nullable
exam_id	int	
ques_id	int	
type	varchar(20)	Χ
description	varchar(100)	Х

#### **Uses:**

Table dbo.question

Table dbo.question\_exam

# Procedure dbo.ins\_crs

Parameter	Data Type	Default	Is Output
@ins_id	int		

### **Result:**

Column	Data Type	Nullable
crs_name	varchar(20)	Χ
Std_per_Course	int	Х

### **Uses:**

Table dbo.course

Table dbo.student\_grade

# Procedure dbo.insert\_student\_course

Parameter	Data Type	Default	Is Output
@stid	int		
@crid	int		

## Result:

Column	Data Type	Nullable
(No column name)	varchar(17)	

## **Uses:**

Table dbo.course

Table dbo.student

Table dbo.student\_grade

# **Procedure dbo.insertIns**

	Parameter	Data Type	Default	Is Output
@i	d	int		
@r	name	varchar(20)		

@salary	int	
@add	varchar(30)	
@did	int	

Column	Data Type	Nullable
(No column name)	varchar(21)	

#### **Uses:**

**Table dbo.department** 

Table dbo.instructor

# **Procedure dbo.INSQuestion**

Parameter	Data Type	Default	Is Output
@type	varchar(20)		
@description	varchar(50)		
@model	varchar(1)		
@mark	int		
@cid	int		
@chdesc1	varchar(50)	null	
@chdesc2	varchar(50)	null	
@chdesc3	varchar(50)	null	
@chdesc4	varchar(50)	null	

### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(12)	

#### **Uses:**

Table dbo.choices

Table dbo.course

Table dbo.question

# **Procedure dbo.questDelete**

Pa	rameter	Data Type	Default	Is Output
@quid		int		

## Result:

Column	Data Type	Nullable
(No column name)	varchar(29)	

## **Uses:**

Table dbo.choices

Table dbo.question

Table dbo.question\_exam

# **Procedure dbo.select\_choice**

Parameter	Data Type	Default	Is Output
@qid	int		

#### Result:

Column	Data Type	Nullable
choice_num	varchar(10)	
choice_desc	varchar(80)	Х

#### **Uses:**

Table dbo.choices

Table dbo.question

# Procedure dbo.select\_que

	Parameter	Data Type	Default	Is Output
@qid		int		

### **Result:**

Column	Data Type	Nullable
description	varchar(100)	Х
model_answer	varchar(1)	Х

#### **Uses:**

Table dbo.question

# Procedure dbo.select\_st\_course

Parameter	Data Type	Default	Is Output
@stid	int		

#### **Result:**

Column	Data Type	Nullable
st_id	int	
crs_id	int	
grade	int	X

#### **Uses:**

Table dbo.student

Table dbo.student\_grade

## **Procedure dbo.selectIns**

Parameter	Data Type	Default	Is Output
@name	varchar(50)		

## **Result:**

Column	Data Type	Nullable
--------	-----------	----------

ins_id	int	
ins_name	varchar(20)	Χ
address	varchar(30)	Χ
dept_id	int	Χ

#### **Uses:**

Table dbo.instructor

# Procedure dbo.selectInsWithId

Parameter	Data Type	Default	Is Output
@id	int		

## Result:

Column	Data Type	Nullable
ins_id	int	
ins_name	varchar(20)	X
address	varchar(30)	Х
dept_id	int	X

### **Uses:**

Table dbo.instructor

# **Procedure dbo.selectqueChoices**

Parameter	Data Type	Default	Is Output
@qid	int		

### **Result:**

Column	Data Type	Nullable
type	varchar(20)	X
description	varchar(100)	Χ
model_answer	varchar(1)	X
а	varchar(80)	Х
b	varchar(80)	Х
С	varchar(80)	Х
d	varchar(80)	Х

#### **Uses:**

Table dbo.choices

Table dbo.question

# Procedure dbo.st\_answer

Parameter	Data Type	Default	Is Output
@exid	int		
@stname	varchar(50)		
@ans1	varchar(1)		
@ans2	varchar(1)		
@ans3	varchar(1)		
@ans4	varchar(1)		

@ans5	varchar(1)
@ans6	varchar(1)
@ans7	varchar(1)
@ans8	varchar(1)
@ans9	varchar(1)
@ans10	varchar(1)

Column	Data Type	Nullable
(No column name)	varchar(18)	

### **Uses:**

Table dbo.exam

Table dbo.question\_exam

Table dbo.st\_exam\_question

Table dbo.student

Table dbo.student\_grade

# Procedure dbo.st\_grad

Parameter	Data Type	Default	Is Output
@std_id	int		

### **Result:**

Column	Data Type	Nullable
grade	int	Χ
crs_name	varchar(20)	Χ

# **Uses:**

Table dbo.course

Table dbo.student\_grade

# **Procedure dbo.std\_delete**

Parameter	Data Type	Default	Is Output
@id	int		

## Result:

Colur	nn	Data Type	Nullable
(No column name)		varchar(18)	

## **Uses:**

Table dbo.student

# Procedure dbo.std\_insert

Parameter	Data Type	Default	Is Output
@id	int		

@fname	varchar(20)
@Iname	varchar(20)
@add	varchar(30)
@age	int
@dept_id	int

Column	Data Type	Nullable
(No column name)	varchar(21)	

#### **Uses:**

Table dbo.department

Table dbo.student

# Procedure dbo.std\_select

Parameter	Data Type	Default	Is Output
@id	int		

### **Result:**

Column	Data Type	Nullable
st_id	int	
st_fname	varchar(20)	X
st_Iname	varchar(20)	X
address	varchar(30)	X
age	int	X
dept_id	int	Х

# **Uses:**

Table dbo.student

# Procedure dbo.std\_update

Parameter	Data Type	Default	Is Output
@id	int		
@fname	varchar(20)		
@Iname	varchar(20)		
@add	varchar(30)		
@age	int		
@dept_id	int		

### Result:

Column	Data Type	Nullable
(No column name)	varchar(18)	

#### **Uses:**

Table dbo.student

# **Procedure dbo.student\_answers**

Darameter	Data Type	Dofoult	To Output

@exam_id	int	
@st_id	int	

Column	Data Type	Nullable
st_id	int	
exam_id	int	
ques_id	int	
st_answer	varchar(10)	Х

#### **Uses:**

 ${\bf Table\ dbo.st\_exam\_question}$ 

# Procedure dbo.topic\_delete

Parameter	Data Type	Default	Is Output
@crs_id	int		
@topic_name	varchar(20)		

#### Result:

Column	Data Type	Nullable
(No column name)	varchar(18)	

# **Uses:**

Table dbo.course\_topic

# Procedure dbo.topic\_insert

Parameter	Data Type	Default	Is Output
@crs_id	int		
@topic_name	varchar(20)		

### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(37)	

#### **Uses:**

Table dbo.course

Table dbo.course\_topic

# Procedure dbo.topic\_select

Parameter	Data Type	Default	Is Output
@crs_id	int		

### **Result:**

Column	Data Type	Nullable
crs_id	int	
topic	varchar(30)	

#### **Uses:**

#### Table dbo.course\_topic

# Procedure dbo.topic\_update

Parameter	Data Type	Default	Is Output
@crs_id	int		
@old_topic_name	varchar(20)		
@new_topic_name	varchar(20)		

## **Result:**

Column	Data Type	Nullable
(No column name)	varchar(44)	

#### **Uses:**

Table dbo.course\_topic

# Procedure dbo.update\_course\_student

Parameter	Data Type	Default	Is Output
@stid	int		
@crsid	int		

#### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(17)	

#### Uses:

Table dbo.course

Table dbo.student

Table dbo.student\_grade

# **Procedure dbo.updateAnswer**

Parameter	Data Type	Default	Is Output
@qid	int		
@answer	varchar(1)		

## **Result:**

Column	Data Type	Nullable
(No column name)	varchar(29)	

## **Uses:**

Table dbo.question

# Procedure dbo.updatechoice

Parameter D	Data Type D	efault Is Ou	tput
-------------	-------------	--------------	------

@qid	int	
@choice	varchar(10)	
@text	varchar(50)	

Column	Data Type	Nullable
(No column name)	varchar(14)	

#### **Uses:**

Table dbo.choices

# Procedure dbo.updateIns

Parameter	Data Type	Default	Is Output
@id	int		
@name	varchar(30)		
@salary	int		
@add	varchar(30)		
@did	int		

### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(21)	

### **Uses:**

Table dbo.department

Table dbo.instructor

# Procedure dbo.updateMark

P	arameter	Data Type	Default	Is Output
@qid		int		
@mark		int		

### **Result:**

Column	Data Type	Nullable
(No column name)	varchar(29)	

#### **Uses:**

Table dbo.question

# **Procedure dbo.updatequesCourse**

Parameter	Data Type	Default	Is Output
@qid	int		
@cid	int		

#### Result:

Column	Data Type	Nullable
(No column name)	varchar(27)	

## **Uses:**

Table dbo.course

Table dbo.question

# **Procedure dbo.updateQuestion**

Parameter	Data Type	Default	Is Output
@qid	int		
@type	varchar(20)		
@description	varchar(50)		
@model	varchar(1)		
@mark	int		
@cid	int		
@chdesc1	varchar(50)	null	
@chdesc2	varchar(50)	null	
@chdesc3	varchar(50)	null	
@chdesc4	varchar(50)	null	

#### Result:

Column	Data Type	Nullable
(No column name)	varchar(12)	

### **Uses:**

Table dbo.choices

Table dbo.course

Table dbo.question