Completion time: 2022-03-10T10:02:11.3100527-06:00

36/40 Excellent #Question 1 3 □CREATE TABLE nkrpssuJob 5 6 job code SMALLINT NOT NULL. job description 7 VARCHAR (25) NOT NULL, job chg hour NUMERIC(7,2) 8 NOT NULL, job last update DEFAULT(GETDATE()), 9 DATE NOT NULL CONSTRAINT pk job code PRIMARY KEY(job code), 10 CONSTRAINT chkuniq\_job\_code UNIQUE(job\_code), Do not need this. Of Job\_code is PK, it is already unique 11 CONSTRAINT chk job code CHECK(job\_code BETWEEN 100 AND 999), 12 CONSTRAINT chk job description CHECK(job description NOT LIKE '%[^A-Z]%'), 13 CONSTRAINT chk job chg hour CHECK(job chg hour BETWEEN 10.00 AND 999.99), 14 CONSTRAINT chk job last update CHECK(FORMAT(job last update, 'DD-Mon-YY') LIKE 15 '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-[1-2][0-9]') 16 17 100 % Messages Commands completed successfully.

Completion time: 2022-03-10T10:03:30.7479667-06:00

```
TO
    19 CREATE TABLE nkrpssuEmployee
    20
                                                  NOT NULL,
    21
            emp num
                                 SMALLINT
            emp lname
                                 VARCHAR(15)
                                                  NOT NULL,
    22
            emp fname
                                                  NOT NULL,
    23
                                 VARCHAR (15)
            emp initial
    24
                                 CHAR(1)
                                                  NULL,
            emp hiredate
                                                              DEFAULT(GETDATE()),
    25
                                 DATE
                                                  NOT NULL
            job code
                                                  NOT NULL,
    26
                                 SMALLINT
    27
            emp years
                                 SMALLINT
                                                  NOT NULL,
            CONSTRAINT pk empl num
                                                  PRIMARY KEY(emp num),
    28
            CONSTRAINT fk job code
                                                  FOREIGN KEY(job code) REFERENCES nkrpssuJob(job code),
    29
                                                  UNIQUE(emp_num),
    30
           CONSTRAINT chk ung emp num
            CONSTRAINT chk_emp_num
                                                  CHECK(emp_num BETWEEN 100 AND 999),
    31
                                                  CHECK(emp_lname NOT LIKE '%[^A-Z]%'),
            CONSTRAINT chk upper emp lname
    32
                                                  CHECK(emp_fname NOT LIKE '%[^A-Z]%'),
            CONSTRAINT chk_upper_emp_fname
    33
            CONSTRAINT chk upper emp initial
                                                  CHECK(emp initial NOT LIKE '%[^A-Z]%'),
    34
            CONSTRAINT chk emp hiredate
                                                  CHECK(FORMAT(emp hiredate, 'DD-Mon-YY') LIKE
    35
                                                  '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-[1-2][0-9]'),
    36
                                                  CHECK(emp years NOT LIKE '%[^0-9]%'),
            CONSTRAINT chk emp years
    37
            CONSTRAINT check range emp years
                                                  CHECK(emp years BETWEEN 00 AND 99),
    38
    39
100 % -
Messages
  Commands completed successfully.
                                            missing constraint to check for hire date to be after
```

January 1, 1988

```
□CREATE TABLE nkrpssuProject
    38
    39
    40
             proj num
                           SMALLINT
                                          NOT NULL,
             proj name
    41
                           VARCHAR(15)
                                          NOT NULL,
             proj value
    42
                           NUMERIC(11,2) NOT NULL,
             proj balance NUMERIC(11,2) NOT NULL,
    43
    44
             emp num
                            SMALLINT
                                          NOT NULL,
             CONSTRAINT pk_proje_num
    45
                                                      PRIMARY KEY (proj num),
                                                      FOREIGN KEY(emp_num) REFERENCES nkrpssuEmployee(emp_num),
    46
             CONSTRAINT fk emp num
            CONSTRAINT chk_unq_proj_num
    47
                                                      UNIQUE(proj_num),
             CONSTRAINT chk_range_proj_num
                                                      CHECK(proj num BETWEEN 10 and 99),
    48
                                                      CHECK(proj name NOT LIKE '%[^A-Z]%'),
    49
             CONSTRAINT chk upper proj name
             CONSTRAINT chk greater proj value
                                                      CHECK(proj value>0.00),
    50
             CONSTRAINT chk greater proj balance
                                                      CHECK(proj_balance>=0.00),
    51
             CONSTRAINT chk_btwn_emp_num
                                                      CHECK(emp num BETWEEN 100 AND 999),
    52
             CONSTRAINT chk_value_emp_num
                                                      CHECK(emp num NOT LIKE '%[^0-9]%')
    53
    54
150 % • 4
Messages
```

Commands completed successfully.

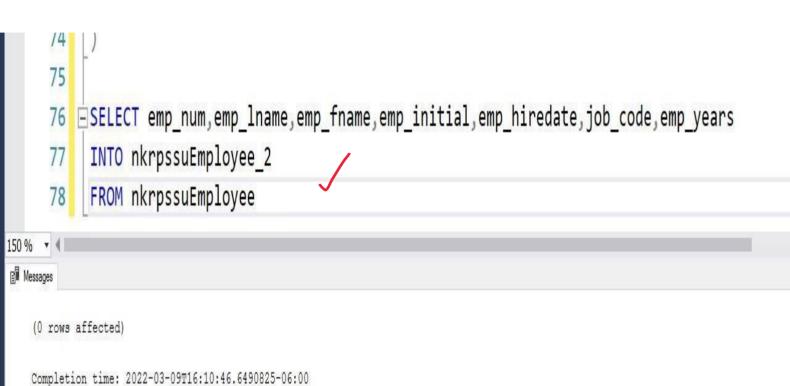
Completion time: 2022-03-09T15:37:21.8886152-06:00

```
59
    60 CREATE TABLE nkrpssuAssignment
    61
    62
           Assign num
                             SMALLINT
                                             NOT NULL,
           Assign date
    63
                                             NOT NULL
                                                          DEFAULT(GETDATE()),
                             DATE
           proj_num
                                             NOT NULL,
    64
                             SMALLINT
    65
           emp num
                                             NOT NULL.
                             SMALLINT
    66
           assign job
                             SMALLINT
                                             NULL,
           assign_chg_hour NUMERIC(7,2)
    67
                                             NOT NULL,
           assign hours
    68
                             NUMERIC(5,1)
                                             NOT NULL.
    69
           assign charge
                            NUMERIC(7,2)
                                             NOT NULL.
           CONSTRAINT pk_Assignm_num
                                             PRIMARY KEY(Assign_num),
    70
           CONSTRAINT fky proj num
    71
                                              FOREIGN KEY(proj num) REFERENCES nkrpssuProject(proj num),
                                              FOREIGN KEY(emp num) REFERENCES nkrpssuEmployee(emp num),
    72
           CONSTRAINT fk empl num
           CONSTRAINT chkuni Assign num
    73
                                             UNIQUE (Assign num),
           CONSTRAINT chek Assign num
                                              CHECK(Assign num between 1000 and 9999),
    74
                                             CHECK(FORMAT(Assign_date, 'DD Mon-YY') LIKE
           CONSTRAINT checkk Assign date
    75
                                               '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-[1-2][0-9]'),
    76
           CONSTRAINT chk_proj_num
                                              CHECK(proj_num BETWEEN 10 and 99),
    77
           CONSTRAINT chk_emplo_num
                                              CHECK(emp num BETWEEN 100 AND 999)
    78
    79
100 %
                                      No such requirement in data dictionary -1
Messages
                                      Missing constraint - Assign date to be after
  Commands completed successfully.
                                      Jan 1, 1988 -1
 Completion time: 2022-03-10T10:10:20.5032782-06:00
```

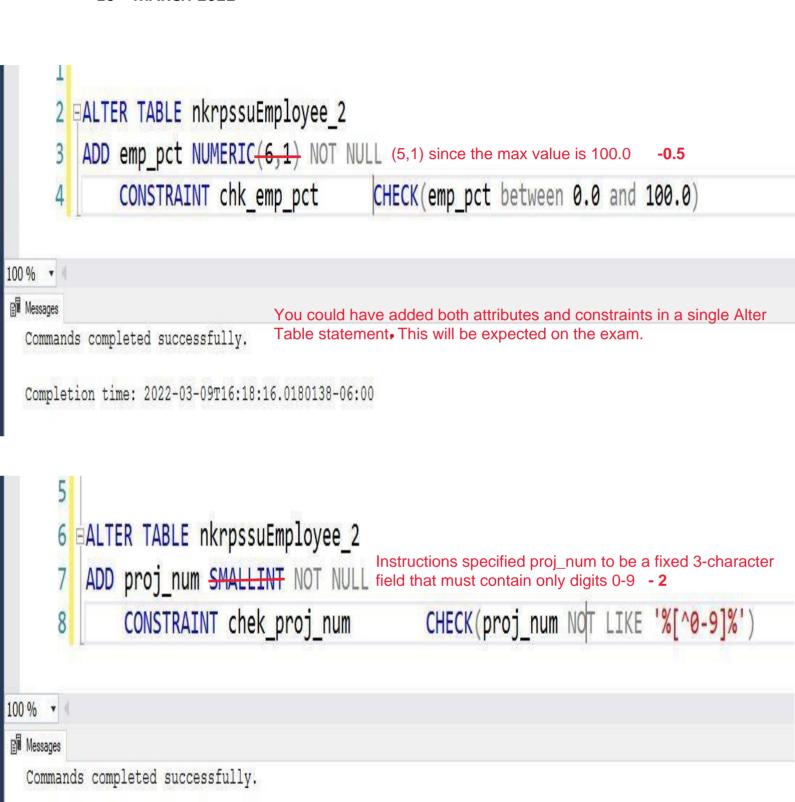
#QUESTION 2

	nkrpssuJob			nk	rpssuAssignment			
	Column Name	Data Type	Allow Nulls	HIN	Column Name	Data Type	Allow Nulls	7
·	🧣 job_code	smallint		8	Assign_num	smallint		
	job_description	varchar(25)			Assign_date	date		
	job_chg_hour	numeric(7, 2)		pr	proj_num	smallint		000
j	job_last_update	date		ρο	emp_num	smallint		1.
					assign_job	smallint		
	c				assign_chg_hour	numeric(7, 2)		1
					assign_hours	numeric(5, 1)		
	relationship labels missing - 2			and in the and			- 11	
	relationsh	ip labels missing	- 2		assign_charge	numeric(7, 2)		
	relationsh	ip labels missing	- 2		2 %			
ıkı	relationsh	ip labels missing	- 2		assign_charge			
ıkı		ip labels missing	Allow Nulls		assign_charge  nkrpssuProject	numeric(7, 2)		
	rpssuEmployee		Allow Nulls		nkrpssuProject Column N	numeric(7, 2)  ame Data Typ		Vulls
	r <b>pssuEmployee</b> Column Name	Data Type	Allow Nulls	₩ ₩	nkrpssuProject Column N proj_num	numeric(7, 2)  ame Data Typo smallint		Vulls
	rpssuEmployee Column Name emp_num	Data Type smallint	Allow Nulls		nkrpssuProject Column N proj_num proj_name	numeric(7, 2)  ame Data Type smallint varchar(15)	e Allow N	]
	rpssuEmployee Column Name emp_num emp_lname	Data Type smallint varchar(15)	Allow Nulls	₩ ₩	nkrpssuProject Column N proj_num proj_name proj_value	numeric(7, 2)  ame Data Type smallint varchar(15) numeric(11, 2)		]
	rpssuEmployee Column Name emp_num emp_lname emp_fname	Data Type smallint varchar(15) varchar(15)	Allow Nulls		nkrpssuProject Column N proj_num proj_name proj_value proj_balance	numeric(7, 2)  ame Data Type smallint varchar(15) numeric(11, 2) numeric(11, 2)	e Allow N	]
8	rpssuEmployee  Column Name emp_num emp_lname emp_fname emp_initial	Data Type smallint varchar(15) varchar(15) char(1)	Allow Nulls		nkrpssuProject Column N proj_num proj_name proj_value	numeric(7, 2)  ame Data Type smallint varchar(15) numeric(11, 2)	e Allow N	]
8	rpssuEmployee Column Name emp_num emp_lname emp_fname emp_initial emp_hiredate	Data Type smallint varchar(15) varchar(15) char(1) date	Allow Nulls		nkrpssuProject Column N proj_num proj_name proj_value proj_balance	numeric(7, 2)  ame Data Type smallint varchar(15) numeric(11, 2) numeric(11, 2)	e Allow N	]

**#QUESTION 3** 



Completion time: 2022-03-09T16:21:31.5800794-06:00



CISSQL\CIS3325.As...g2022 - Diagram\_4\* → X CISSQL\CIS3325.As...g2022 - Diagram\_3

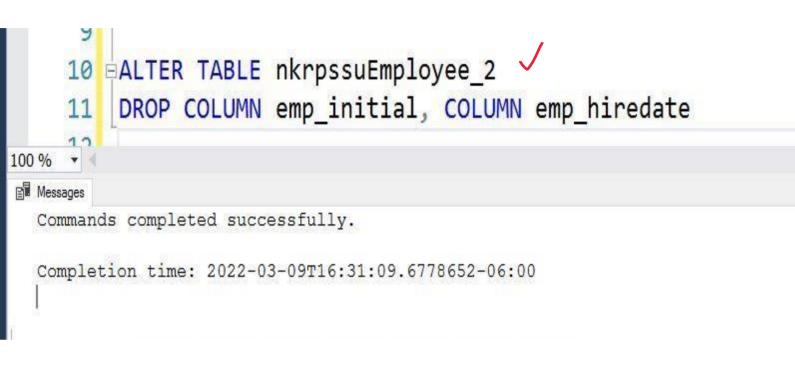
CISSQL\CIS3325.As...g2022 - Diagram\_2

CISSQL\CIS3325.As...g20

Column Name	Data Type	Allow Nulls
emp_num	smallint	
emp_lname	varchar(15)	
emp_fname	varchar(15)	
emp_initial	char(1)	$\checkmark$
emp_hiredate	date	
job_code	smallint	
emp_years	smallint	
emp_pct	numeric(6, 1)	
proj_num	smallint char(3)	



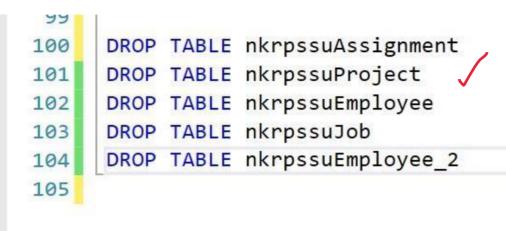
CISSQL\CIS3325.As...022 - nkrpssu\_emp2 + X CISSQL\CIS3325.As...g2022 - Diagram\_3

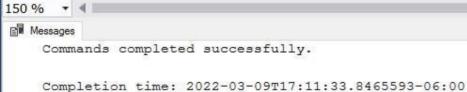


SQLQuery2.sql - Cl...(TXSTATE\yjn6 (70))\*

Column Name	Data Type	Allow Nulls
emp_num	smallint	
emp_Iname	varchar(15)	
emp_fname	varchar(15)	
job_code	smallint	
emp_years	smallint	
emp_pct	numeric(6, 1)	
proj_num	smallint	
	No DDL provided for this change and associated check constraint -2	

#### **#QUESTION 4**





**#QUESTION 5** 

USE Assignment6Spring2022

```
--Code to remove all tables that contain label nkrpssu
DROP TABLE nkrpssuAssignment
DROP TABLE nkrpssuProject
DROP TABLE nkrpssuEmployee
DROP TABLE nkrpssuJob
DROP TABLE nkrpssuEmployee_2
CREATE TABLE nkrpssuJob
                                  SMALLINT
                                                       NOT NULL,
      job_code
      job_description
                                  VARCHAR(25)
                                                       NOT NULL,
                           NUMERIC(7,2) NOT NULL,
      job_chg_hour
                                 DATE
                                                       NOT NULL
                                                                     DEFAULT(GETDATE()),
      job_last_update
      CONSTRAINT pk_job_code
                                     PRIMARY KEY(job_code),
      CONSTRAINT chkuniq_job_code
                                     UNIQUE(job_code),
      CONSTRAINT chk_job_code
                                     CHECK(job_code BETWEEN 100 AND 999),
      CONSTRAINT chk_job_description CHECK(job_description NOT LIKE '%[^A-Z]%')
      CONSTRAINT chk_job_chg_hour CHECK(job_chg_hour BETWEEN 10.00 AND 999.99),
      CONSTRAINT chk_job_last_update CHECK(FORMAT(job_last_update, 'DD-Mon-YY') LIKE
                                                               '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-[1-2][0-
9]')
CREATE TABLE nkrpssuEmployee
                                         SMALLINT
                                                              NOT NULL,
      emp_num
                                                       NOT NULL,
      emp_lname
                                  VARCHAR (15)
      emp_fname
                                  VARCHAR (15)
                                                       NOT NULL,
      emp_initial
                                  CHAR(1)
                                                              NULL,
                                                NOT NULL
                           DATE
                                                              DEFAULT(GETDATE()),
      emp_hiredate
                                  SMALLINT
                                                       NOT NULL,
      job_code
                                  SMALLINT
                                                       NOT NULL,
      emp_years
                                                       PRIMARY KEY(emp_num),
      CONSTRAINT pk_empl_num
      CONSTRAINT fk_job_code
                                                       FOREIGN KEY(job_code) REFERENCES nkrpssuJob(job_code),
      CONSTRAINT chk_unq_emp_num
                                                UNIQUE(emp_num),
                                                       CHECK(emp_num BETWEEN 100 AND 999),
      CONSTRAINT chk_emp_num
                                                CHECK(emp_lname NOT LIKE '%[^A-Z]%'),
      CONSTRAINT chk_upper_emp_lname
                                                CHECK(emp_fname NOT LIKE '%[^A-Z]%'),
      CONSTRAINT chk_upper_emp_fname
      CONSTRAINT chk_upper_emp_initial CHECK(emp_initial NOT LIKE '%[^A-Z]%'),
      CONSTRAINT chk_emp_hiredate
                                                CHECK(FORMAT(emp_hiredate,'DD-Mon-YY') LIKE
                                                                     '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-
[1-2][0-9]'),
      CONSTRAINT chk_emp_years
                                                CHECK(emp_years NOT LIKE '%[^0-9]%'),
      CONSTRAINT check_range_emp_years CHECK(emp_years BETWEEN 00 AND 99),
CREATE TABLE nkrpssuProject
                 SMALLINT
                                  NOT NULL,
   proj_num
      proj name
                    VARCHAR(15) NOT NULL,
      proj_value
                    NUMERIC(11,2) NOT NULL,
```

proj\_balance NUMERIC(11,2) NOT NULL,

```
NOT NULL,
                     SMALLINT
      CONSTRAINT pk_proje_num
                                                        PRIMARY KEY (proj_num),
                                                        FOREIGN KEY(emp_num) REFERENCES nkrpssuEmployee(emp_num),
      CONSTRAINT fk_emp_num
                                                 UNIQUE(proj_num),
      CONSTRAINT chk_unq_proj_num
                                                 CHECK(proj_num BETWEEN 10 and 99),
      CONSTRAINT chek_range_proj_num
      CONSTRAINT chk_upper_proj_name
                                                 CHECK(proj_name NOT LIKE '%[^A-Z]%'),
      CONSTRAINT chk_greater_proj_value CHECK(proj_value>0.00),
      CONSTRAINT chk_greater_proj_balance CHECK(proj_balance>=0.00),
CONSTRAINT chk btwn emp num CHECK(emp num BETWEEN 100 /
                                                 CHECK(emp num BETWEEN 100 AND 999),
      CONSTRAINT chk btwn emp num
      CONSTRAINT chk_value_emp_num
                                                 CHECK(emp_num NOT LIKE '%[^0-9]%')
CREATE TABLE nkrpssuAssignment
                                        NOT NULL,
                    SMALLINT
  Assign num
                           DATE
  Assign_date
                                               NOT NULL
                                                             DEFAULT(GETDATE()),
  proj_num
                            SMALLINT
                                                 NOT NULL,
                           SMALLINT
                                                NOT NULL.
  emp num
  assign_job
                    SMALLINT
                                         NULL,
  assign_chg_hour NUMERIC(7,2) NOT NULL,
  assign_hours
                           NUMERIC(5,1) NOT NULL,
                  NUMERIC(7,2) NOT NULL,
  assign charge
  CONSTRAINT pk_Assignm_num
                                         PRIMARY KEY(Assign num),
  CONSTRAINT fky_proj_num CONSTRAINT fk_empl_num
                                          FOREIGN KEY(proj num) REFERENCES nkrpssuProject(proj num),
                                          FOREIGN KEY(emp num) REFERENCES nkrpssuEmployee(emp num),
  CONSTRAINT chkuni Assign num
                                          UNIQUE (Assign num),
                                          CHECK(Assign_num between 1000 and 9999),
  CONSTRAINT chek Assign num
  CONSTRAINT checkk Assign date CHECK(FORMAT(Assign date, 'DD-Mon-YY') LIKE
                                                                 '[0-3][0-9]-[ADFJMOSN][aceopu][bcglnprtvy]-[1-
2][0-9]'),
  CONSTRAINT chk proj num
                                          CHECK(proj num BETWEEN 10 and 99)
  CONSTRAINT chk_emplo_num
                                          CHECK(emp num BETWEEN 100 AND 999)
-- Code to make a copy of teh current nkrpssuEmployee Table
SELECT emp_num,emp_lname,emp_fname,emp_initial,emp_hiredate,job_code,emp_years
INTO nkrpssuEmployee 2
FROM nkrpssuEmployee
--Adding New Attributes emp_pct and proj_num to nkrpssuEmployee_2 table
ALTER TABLE nkrpssuEmployee_2
ADD emp_pct NUMERIC(6,1) NOT NULL
      CONSTRAINT chk_emp_pct
                                         CHECK(emp_pct between 0.0 and 100.0)
ALTER TABLE nkrpssuEmployee 2
ADD proj_num SMALLINT NOT NULL
      CONSTRAINT chek_proj_num
                                   CHECK(proj num NOT LIKE '%[^0-9]%')
--Removing Attributes emp_initial and emp_hiredate from nkrpssuEmployee 2 table
ALTER TABLE nkrpssuEmployee 2
DROP COLUMN emp initial, COLUMN emp hiredate
--Code to remove all tables that contain label nkrpssu
DROP TABLE nkrpssuAssignment
DROP TABLE nkrpssuProject
DROP TABLE nkrpssuEmployee
DROP TABLE nkrpssuJob
             DROP
                                  TABLE
             nkrpssuEmployee_2
```