Refer Excel File ‘Tables - Exercise 1A’ attached in the same folder for tables, constraints and the data to be inserted.

1. Create the tables with the mentioned constraints and name the tables appropriately with your emp\_id appended.

CREATE TABLE IN1542.Discounts

(DiscountType VARCHAR(40) NOT NULL,

Stor\_id char(4) foreign key(Stor\_id) references Stores(stor\_id),

lowqty smallint check(lowqty>0),

highqty smallint,

discount decimal(4,2));

CREATE TABLE IN1542.Stores (stor\_id char(4) primary key,

stor\_name varchar(40) NOT NULL,

stor\_address varchar(40),

city varchar(20),

state char(20),

zip char(5));

CREATE TABLE IN1542.Sales(stor\_id char(4) foreign key references Stores(stor\_id),

ord\_num varchar(20) not null,

ord\_date datetime not null,

qty smallint check(qty>0),

payterms varchar(12),

title\_id varchar(6) foreign key references Titles(title\_id));

CREATE TABLE IN1542.Authors(au\_id varchar(11) primary key,

au\_Iname varchar(40) not null,

au\_fname varchar(20) not null,

phone char(12),

address varchar(40),

city varchar(20),

state char(2),

zip char(5),

contract bit );

CREATE TABLE IN1542.Titles(title\_id varchar(6) primary key,

title varchar(80) not null,type char(12) not null,

pub\_id char(4) foreign key(pub\_id ) references Publishers(pub\_id),

price money,

advance money,

royalty int,

ytd\_sales int,

notes varchar(200),

pubdate datetime not null);

CREATE TABLE IN1542.TitleAuthor(

au\_id varchar(11) foreign key(au\_id) references Authors(au\_id),

title\_id varchar(6) foreign key(title\_id) references Titles(title\_id),

au\_ord tinyint,

royaltyper int

);

CREATE TABLE IN1542.Royshed(

title\_id varchar(6) foreign key(title\_id) references Titles(title\_id),

lorange int,

hirange int,

royalty int);

CREATE TABLE IN1542.Publishers (pub\_id char(4) primary key,

pub\_name varchar(40) not null,

city varchar(20),

state char(2),

country varchar(30));

CREATE TABLE IN1542.Pub\_Info(

pub\_id char(4) foreign key(pub\_id) references Publishers (pub\_id),

logo image,

pr\_Info text);

CREATE TABLE IN1542.Employee (

emp\_id char(9) primary key,

fname varchar(200) not null,

minit char(1),

Iname varchar(200),

job\_id smallint foreign key(job\_id) references Jobs(job\_id),

job\_IVI TINYINT ,

pub\_id char(4) foreign key(pub\_id) references Publishers(pub\_id),

Hire\_Date datetime not null);

CREATE TABLE IN1542.Jobs(

job\_id smallint primary key,

job\_desc varchar(50) not null,

min\_IVI tinyint,

max\_IVI tinyint,

Job\_code char(4) unique);

2. Have a look at the data (See the Excel file attached (Data to be inserted- Sheet) )

a. Insert the First Row of stores table into the table without the columns specified in the insert clause.

INSERT INTO IN1542.Stores

values

('6380' , 'Eric the Read Books' , '788 Catamaugus Ave.' , 'Seattle' , 'WA' , '98056' );

b. Insert the Second Row of stores Table into the table with the columns specified in the insert clause explicitly and confirm the data inserted.

INSERT INTO IN1542.Stores(stor\_id , stor\_name, stor\_address, city, state, zip)

VALUES( '7066' , 'Barnums' , '567 Pasadena Ave.' , 'Tustin' , 'CA' , '92789' );

select \* from IN1542.Stores

c. Insert all other rows into Stores table as it is in the table output

Insert into IN1542.Stores

values( '7067' , 'News & Brews' , ' 577 First St. ' , ' Los Gatos ' , ' CA ' , '96745' ),

('7131' , ' Doc-U-Mat: Quality Laundry and Books ' , ' 24-A Avrogado Way ' , ' Remulade ' , ' WA ' , '98014') ,

('7896' , ' Fricative Bookshop ' , ' 89 Madison St. ' , ' Fremont ' , ' CA ' , '90019') ,

('8042' , ' Bookbeat ' , ' 679 Carson St. ' , ' Portland ' , ' OR ' , '89076');

3.Insert the data into all the tables using the data in the excel sheet attached.

insert into IN1542.Discounts values(

'Initial Customer','6380',110,NULL,10.5),(

'Volume Discount','7131',100,1000,6.7),(

'Customer Discount','8042',23,NULL,5);

INSERT INTO IN1542.Sales VALUES(

'6380','6871','Sep 14 1994 12:00AM',5,'Net 60','BU1032'),(

'7066','A2976','May 24 1993 12:00AM',50,'Net 30','PC8888'),(

'7131','P3087a','May 29 1993 12:00AM',20,'Net 60','PS1372' ),(

'7896','QQ2299','Oct 28 1993 12:00AM',15,'Net 60','BU7832'),(

'7896','X999','Feb 21 1993 12:00AM',35,'ON invoice','BU2075'),(

'8042','423LL930','Sep 14 1994 12:00AM',10,'ON invoice','BU1032'),(

'8042','P723','Mar 11 1993 12:00AM',25,'Net 30','BU1111' ),(

'8042','QA879.1','May 22 1993 12:00AM',30,'Net 30','PC1035' );

insert into IN1542.Authors

values ('172-32-1176','White','Johnson','408 496-7223','10932 Bigge Rd.','Menlo Park','CA','94025',1),

('213-46-8915','Green','Marjorie','415 986-7020','309 63rd St. #411','Oakland','CA','94618',1),

('238-95-7766','Carson','Cheryl','415 548-7723','589 Darwin Ln.','Berkeley','CA','94705',1),

('267-41-2394','OLeary','Michael','408 286-2428','22 Cleveland Av. #14','San Jose','CA','95128',1),

('274-80-9391','Straight','Dean','415 834-2919','5420 College Av.','Oakland','CA','94609',1),

('341-22-1782','Smith','Meander','913 843-0462','10 Mississippi Dr.','Lawrence','KS','66044',0),

('409-56-7008','Bennet','Abraham','415 658-9932','6223 Bateman St.','Berkeley','CA','94705',1),

('427-17-2319','Dull','Ann','415 836-7128','3410 Blonde St.','Palo Alto','CA','94301',1),

('472-27-2349','Gringlesby','Burt','707 938-6445','PO Box 792','Covelo','CA','95428',1),

('486-29-1786','Locksley','Charlene','415 585-4620','18 Broadway Av.','San Francisco','CA','94130',1);

INSERT INTO IN1542.Titles VALUES(

'BU1032','The Busy Executives Database Guide','business','1389',19.99,5000,10,4095,'An overview of available database systems with emphasis on common business applications. Illustrated.','Jun 12 1991 12:00AM'),(

'BU1111','Cooking with Computers: Surreptitious Balance Sheets','business','1389',11.95,5000,10,3876,'Helpful hints on how to use your electronic resources to the best advantage.','Jun 9 1991 12:00AM'),(

'BU2075','You Can Combat Computer Stress!','business','736',2.99,10125,24,18722,'The latest medical and psychological techniques for living with the electronic office. Easy-to-understand explanations.','Jun 30 1991 12:00AM'),(

'BU7832','Straight Talk About Computers','business','1389',19.99,5000,10,4095,'Annotated analysis of what computers can do for you: a no-hype guide for the critical user.','Jun 22 1991 12:00AM'),(

'MC2222','Silicon Valley Gastronomic Treats','mod\_cook','877',19.99,0,12,2032,'Favorite recipes for quick, easy, and elegant meals.','Jun 9 1991 12:00AM'),(

'MC3021','The Gourmet Microwave','mod\_cook','877',2.99,15000,24,22246,'Traditional French gourmet recipes adapted for modern microwave cooking.','Jun 18 1991 12:00AM'),(

'MC3026','The Psychology of Computer Cooking','UNDECIDED','877',NULL,NULL,NULL,NULL,'NULL','Apr 28 1995 10:36AM'),(

'PC1035','But Is It User Friendly?','popular\_comp','1389',22.95,7000,16,8780,'A survey of software for the naive user, focusing on the "friendliness" of each.','Jun 30 1991 12:00AM'),(

'PC8888','Secrets of Silicon Valley','popular\_comp','1389',20,8000,10,4095,'Muckraking reporting on the worlds largest computer hardware and software manufacturers.','Jun 12 1994 12:00AM'),(

'PC9999','Net Etiquette','popular\_comp','1389',NULL,NULL,NULL,NULL,'A must-read for computer conferencing.','Apr 28 1995 10:36AM'),(

'PS1372','Computer Phobic and Non-Phobic Individuals Behavior Variations','psychology','877',21.59,7000,10,375,'A must for the

specialist examining the difference between those who hate and fear computers and those who dont.','Oct 21 1991 12:00AM');

INSERT INTO IN1542.TitleAuthor VALUES (

'213-46-8915','BU1032',2,40 ),(

'213-46-8915','BU2075',1,100),(

'238-95-7766','PC1035',1,100),(

'267-41-2394','BU1111',2,40 ),(

'274-80-9391','BU7832',1,100),(

'409-56-7008','BU1032',1,60 ),(

'427-17-2319','PC8888',1,50 ),(

'486-29-1786','PC9999',1,100);

'486-29-1786','PS7777',1,100)

'472-27-2349','TC7777',3,30 ),(

'267-41-2394','TC7777',2,30 ),(

('172-32-1176','PS3333',1,100)

'648-92-1872','TC4203',1,100),(

'672-71-3249','TC7777',1,40 ),(

'712-45-1867','MC2222',1,100),(

'722-51-5454','MC3021',1,75 );

insert into IN1542.Royshed values('BU1032',0,5000,10),(

'BU1032',5001,50000,12),(

'PC1035',0,2000,10),(

'PC1035',2001,3000,12),(

'PC1035',3001,4000,14),(

'PC1035',4001,10000,16),(

'PC1035',10001,50000,18),(

'BU2075',0,1000,10),(

'BU2075',1001,3000,12),(

'BU2075',3001,5000,14),(

'BU2075',5001,7000,16),(

'BU2075',7001,10000,18),(

'BU2075',10001,12000,20),(

'BU2075',12001,14000,22),(

'BU2075',14001,50000,24),(

'MC3021',0,1000,10),(

'MC3021',1001,2000,12),(

'MC3021',2001,4000,14),(

'MC3021',4001,6000,16),(

'MC3021',6001,8000,18),(

'MC3021',8001,10000,20),(

'MC3021',10001,12000,22),(

'MC3021',12001,50000,24),(

'PC8888',0,5000,10),(

'PC8888',5001,10000,12),(

'PC8888',10001,15000,14),(

'PC8888',15001,50000,16),(

'BU1111',0,4000,10),(

'BU1111',4001,8000,12),(

'BU1111',8001,10000,14),(

'BU1111',12001,16000,16),(

'BU1111',16001,20000,18),(

'BU1111',20001,24000,20),(

'BU1111',24001,28000,22),(

'BU1111',28001,50000,24),(

'MC2222',0,2000,10),(

'MC2222',2001,4000,12),(

'MC2222',4001,8000,14),(

'MC2222',8001,12000,16),(

'MC2222',12001,20000,18),(

'MC2222',20001,50000,20),(

'BU7832',0,5000,10),(

'BU7832',5001,10000,12),(

'BU7832',10001,15000,14),(

'BU7832',15001,20000,16),(

'BU7832',20001,25000,18),(

'BU7832',25001,30000,20),(

'BU7832',30001,35000,22),(

'BU7832',35001,50000,24),(

'PS1372',0,10000,10),(

'PS1372',10001,20000,12),(

'PS1372',20001,30000,14),(

'PS1372',30001,40000,16),(

'PS1372',40001,50000,18);

INSERT INTO IN1542.Publishers

VALUES('736','New Moon Books','Boston','MA','USA'),

('877','Binnet & Hardley','Washington','DC','USA'),(

'1389','Algodata Infosystems','Berkeley','CA','USA'),(

'1622','Five Lakes Publishing','Chicago','IL','USA' ),(

'1756','Ramona Publishers','Dallas','TX','USA'),(

'9901','GGG&G','München',NULL,'Germany' ),(

'9952','Scootney Books','New York','NY','USA'),(

'9999','Lucerne Publishing','Paris',NULL,'France');

insert into IN1542.Pub\_Info VALUES(

'736','Newmoon.bmp','This is sample text data for New Moon Books, publisher 0736 in the pubs database. New Moon Books is located in Boston, Massachusetts.'),(

'877','Binnet.bmp','This is sample text data for Binnet & Hardley, publisher 0877 in the pubs database. Binnet & Hardley is located in Washington, D.C.'),(

'1389','Algodata.bmp','This is sample text data for Algodata Infosystems, publisher 1389 in the pubs database. Algodata Infosystems is located in Berkeley, California.'),(

'1622','5lakes.bmp','This is sample text data for Five Lakes Publishing, publisher 1622 in the pubs database. Five Lakes Publishing is located in Chicago, Illinois.'),(

'1756','Ramona.bmp','This is sample text data for Ramona Publishers, publisher 1756 in the pubs database. Ramona Publishers is located in Dallas, Texas.'),(

'9901','Gggg.bmp','This is sample text data for GGG&G, publisher 9901 in the pubs database. GGG&G is located in München, Germany.'),(

'9952','Scootney.bmp','This is sample text data for Scootney Books, publisher 9952 in the pubs database. Scootney Books is located in New York City, New York.'),(

'9999','Lucerne.bmp','This is sample text data for Lucerne Publishing, publisher 9999 in the pubs database. Lucerne Publishing is located in Paris, France.');

INSERT INTO IN1542.Employee values('PMA42628M','Paolo','M','Accorti',13,35,'877','Aug 27 1992 12:00AM'),(

'PSA89086M','Pedro','S','Alfonso',14,89,'1389','Dec 24 1990 12:00AM'),(

'VPA30890F','Victoria','P','Ashworth',6,140,'877','Sep 13 1990 12:00AM'),(

'L-B31947F','Lesley',NULL,'Brown',7,120,'877','Feb 13 1991 12:00AM'),(

'F-C16315M','Francisco',NULL,'Chang',4,227,'9952','Nov 3 1990 12:00AM'),(

'PTC11962M','Philip','T','Cramer',2,215,'9952','Nov 11 1989 12:00AM'),(

'A-C71970F','Aria',NULL,'Cruz',10,87,'1389','Oct 26 1991 12:00AM'),(

'AMD15433F','Ann','M','Devon',3,200,'9952','Jul 16 1991 12:00AM'),(

'ARD36773F','Anabela','R','Domingues',8,100,'877','Jan 27 1993 12:00AM'),(

'PHF38899M','Peter','H','Franken',10,75,'877','May 17 1992 12:00AM'),(

'PXH22250M','Paul','X','Henriot',5,159,'877','Aug 19 1993 12:00AM'),(

'CFH28514M','Carlos','F','Hernández',5,211,'9999','Apr 21 1989 12:00AM'),(

'PDI47470M','Palle','D','Ibsen',7,195,'736','May 9 1993 12:00AM'),(

'KJJ92907F','Karla','J','Jablonski',9,170,'9999','Mar 11 1994 12:00AM'),(

'KFJ64308F','Karin','F','Josephs',14,100,'736','Oct 17 1992 12:00AM');

INSERT INTO IN1542.Jobs values (

1,'New Hire - Job not specified',10,10,'1120'),

(2,'Chief Executive Officer',200,250,'1122'),

(3,'Business Operations Manager',175,225,'1125'),(

4,'Chief Financial Officer',175,250,'1126' ),(

5,'Publisher',150,250,'1145' ),(

6,'Managing Editor',140,225,'1102' ),(

7,'Marketing Manager',120,200,'1245'),(

8,'Public Relations Manager',100,175,'1458' ),(

9,'Acquisitions Manager',75,175,'1265' ),(

10,'Productions Manager',75,165,'1258' ),(

11,'Operations Manager',75,150,'4789' ),(

13,'Sales Representative',25,100,'2033' ),(

14,'Designer',25,100,'1025' );

4. Update column lorange in the table Royshed from 0 to 100

select \* from IN1542.Royshed

5. Update au\_ord from 2 to 1 when the title\_id is ‘BU1111’ and ‘TC7777’ in the table TitleAuthors.

update IN1542.TitleAuthor

set au\_ord=1

where au\_ord=2 and( title\_id ='BU1111' OR title\_id='TC7777');

6. Try inserting Null into column Discount Type in the table Discounts. Display the error message.

update IN1542.Discounts set discounttype=null;

Msg 515, Level 16, State 2, Line 8

Cannot insert the value NULL into column 'DiscountType', table 'Bootcamp.IN1542.Discounts'; column does not allow nulls. UPDATE fails.

The statement has been terminated.

Completion time: 2022-07-10T18:19:33.9292296+05:30

7. Check all the constraints are working by inserting sample data and show the result set.

CREATE TABLE IN1542.Jobs(

job\_id smallint primary key,

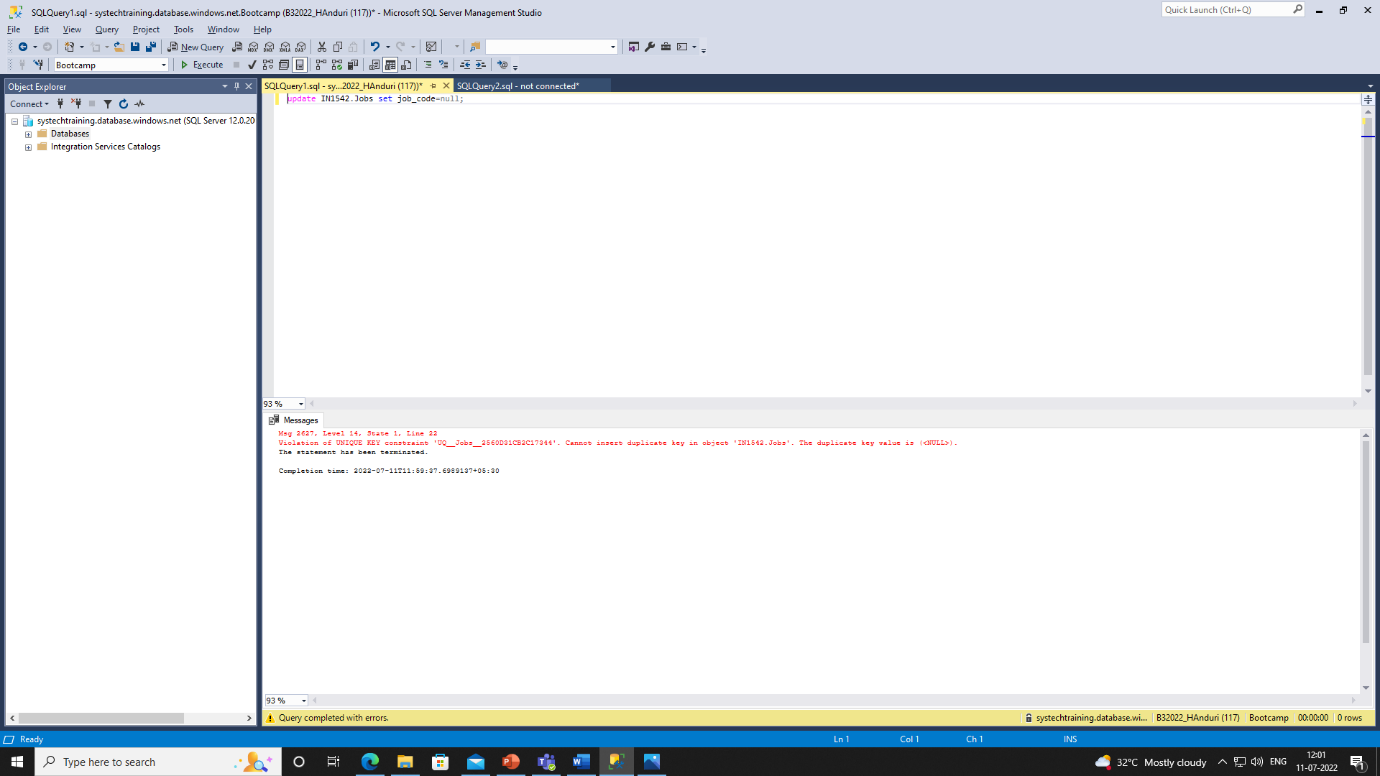
job\_desc varchar(50) not null,

min\_IVI tinyint,

max\_IVI tinyint,

Job\_code char(4) unique);

a.checking the unique constraints



b.

8. Create a table Jobs\_Dup and perform the following.

select \* into Jobs\_Dup from IN1542.Jobs;

1. Delete the jobs that have min\_lvl as 175

delete from Jobs\_Dup where min\_IVI =175;

1. Delete the jobs whose job\_desc is publisher and Editor.

delete from Jobs\_Dup where ( job\_desc='Publisher' or job\_desc='Editor');

c. Delete the records from Jobs\_Dup

delete from Jobs\_Dup

9. Display the employee first name and lastname who were hired after 1992

select fname, Iname from IN1542.Employee where datename(year,Hire\_Date)>1992;

10. Display the titles that were published between Jun 1991 and Jun 1994

select\* from IN1542.Titles where (datename(year,pubdate) between '1991' and '1994' ) and

(datename(month,pubdate) ='JUNE');