

CS 5200 P4

1. [10pt] Create the **ArtistWorkNetView** view and submit 1) [5pt] a screenshot of **SQL** creating the view, and 2) [5pt] a screenshot of the **test result**.

The first screenshot shows the phpMyAdmin interface with the 'vrg' database selected. The 'artist' table is visible in the left sidebar. The SQL query editor contains the following code:

```
1 CREATE VIEW ArtistWorkNetView AS
2 SELECT LastName AS ArtistLastName, FirstName AS ArtistFirstName, W.WorkID, Title, Copy, DateSold,
3 AcquisitionPrice, SalesPrice, (SalesPrice - AcquisitionPrice) AS NetProfit
4 FROM trans AS T JOIN Work AS W
5 ON T.WorkID = W.WorkID
6 JOIN ARTIST AS A
7 ON W.ArtistID = A.ArtistID
```

The second screenshot shows the same phpMyAdmin interface after the view has been created. The 'Views' section in the left sidebar now includes 'artistworknetview'. The SQL query editor shows the same code, and a message at the top indicates: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0002 seconds.)'.

Current selection does not contain a unique column. Grid edit, Edit, Copy and Delete features may result in undesired behavior.

Showing rows 0 - ... (Query took 0.0007 seconds.)

```
SELECT * FROM `artistworknetview`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Number of rows: 25 Filter rows: Search this table

	ArtistLastName	ArtistFirstName	WorkID	Title	Copy	DateSold	AcquisitionPrice	SalesPrice	NetP
<input type="checkbox"/>	Chagall	Marc	554	I and the Village	834/1000	2019-03-16	125.00	225.00	
<input type="checkbox"/>	Chagall	Marc	562	The Fiddler	251/1000	2019-08-15	125.00	225.00	
<input type="checkbox"/>	Chagall	Marc	585	The Fiddler	252/1000	2020-09-27	125.00	225.00	
<input type="checkbox"/>	Graves	Morris	511	Surf and Bird	142/500	2017-12-19	250.00	500.00	
<input type="checkbox"/>	Graves	Morris	548	Night Bird	Unique	2018-11-28	15000.00	27500.00	125
<input type="checkbox"/>	Graves	Morris	561	Sunflower	Unique	2019-06-28	10000.00	17500.00	75

2. [10pt] Create the **FirstNameFirst** function and submit 1) [5pt] a screenshot of **SQL** creating the view, and 2) [5pt] a screenshot of the **test result**.

Run SQL query/queries on table vrg.artistworknetview:

```
1 DELIMITER //
2 CREATE
3 FUNCTION FirstNameFirst (FrstNm VARCHAR(25), LstNm VARCHAR(25))
4 RETURNS VARCHAR(60) DETERMINISTIC
5 BEGIN
6 DECLARE
7 F11Nm varchar(60);
8 SET F11Nm = CONCAT(FrstNm, ' ', LstNm);
9 RETURN F11Nm;
10 END
11 //
12
13 # CALL FirstNameFirst('John', 'Doe');
```

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

Bind parameters

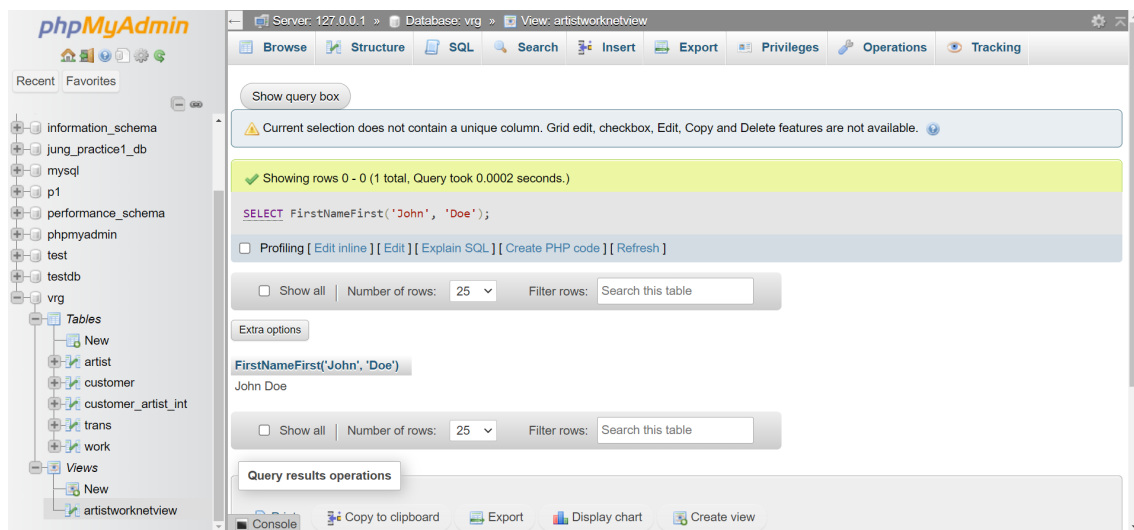
Console: this SQL query:

Show query box

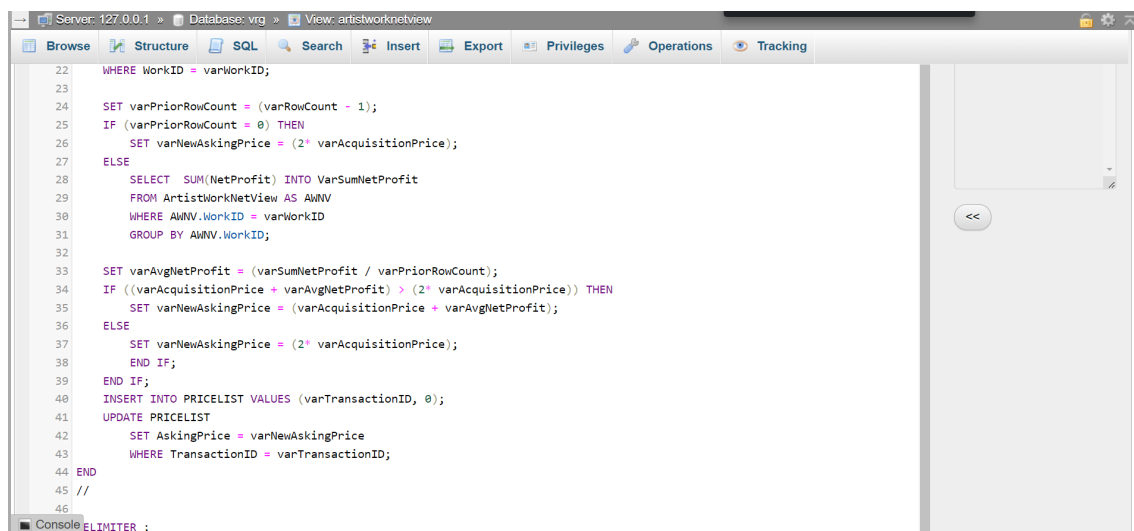
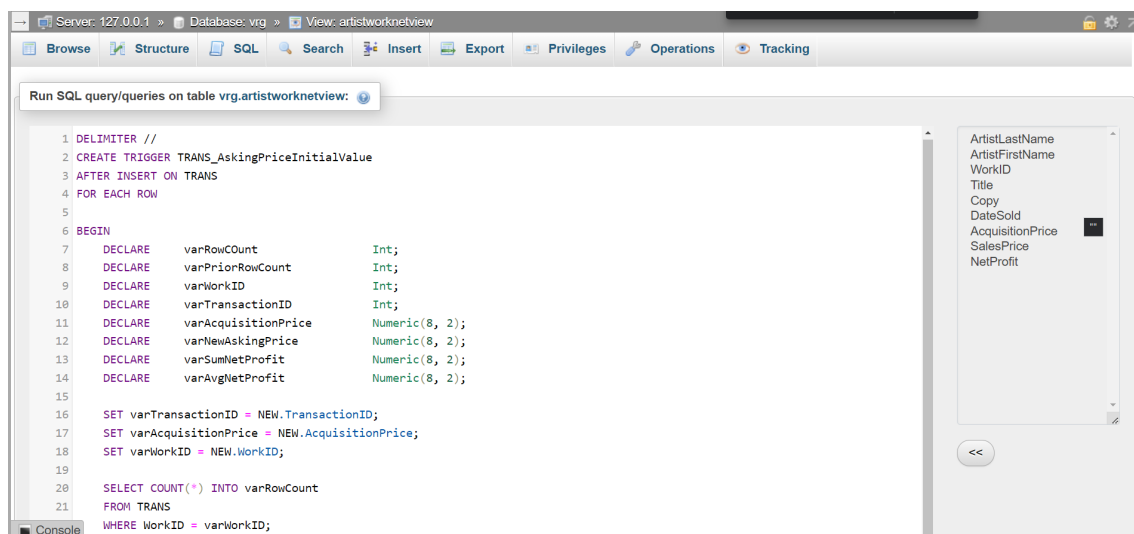
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0030 seconds.)

```
CREATE FUNCTION FirstNameFirst (FrstNm VARCHAR(25), LstNm VARCHAR(25)) RETURNS VARCHAR(60) DETERMINISTIC BEGIN DECLARE F11Nm
varchar(60); SET F11Nm = CONCAT(FrstNm, ' ', LstNm); RETURN F11Nm; END;
```

[Edit inline] [Edit] [Create PHP code]



3. [10pt] Create the **TRANS_AfterInsertSetAskingPrice** trigger and submit 1) [5pt] a screenshot of **SQL** creating the view, and 2) [5pt] a screenshot of the **test result**.



Hide query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0111 seconds.)

```
CREATE TRIGGER TRANS_AskingPriceInitialValue AFTER INSERT ON TRANS FOR EACH ROW BEGIN DECLARE varRowCount Int; DECLARE varPriorRowCount Int; DECLARE varWorkID Int; DECLARE varTransactionID Int; DECLARE varAcquisitionPrice Numeric(8, 2); DECLARE varNewAskingPrice Numeric(8, 2); DECLARE varSumNetProfit Numeric(8, 2); DECLARE varAvgNetProfit Numeric(8, 2); SET varTransactionID = NEW.TransactionID; SET varAcquisitionPrice = NEW.AcquisitionPrice; SET varWorkID = NEW.WorkID; SELECT COUNT(*) INTO varRowCount FROM TRANS WHERE WorkID = varWorkID; SET varPriorRowCount = (varRowCount - 1); IF (varPriorRowCount = 0) THEN SET varNewAskingPrice = (2 * varAcquisitionPrice); ELSE SELECT SUM(NetProfit) INTO VarSumNetProfit FROM ArtistWorkNetView AS AaNV WHERE AaNV.WorkID = varWorkID GROUP BY AaNV.WorkID; SET varAvgNetProf[...]
```

Recent Favorites

customer_artist_int

pricelist

trans

Columns

New

AcquisitionPrice

AskingPrice (dec

CustomerID (MU

DateAcquired (d

DateSold (date, f

SalesPrice (dec

TransactionID (P

WorkID (MUL, in

Indexes

Triggers

Run SQL query/queries on table vrg.artistworknetview:

```
1 INSERT INTO TRANS (TransactionID, DateAcquired, AcquisitionPrice, AskingPrice, DateSold, SalesPrice, CustomerID, WorkID)
2 VALUES
3 (255, '2014-11-08', 200.00, NULL, NULL, NULL, NULL, 500);
```

ArtistLastName

ArtistFirstName

WorkID

Title

Copy

DateSold

AcquisitionPrice

SalesPrice

NetProfit

SELECT *

SELECT

INSERT

UPDATE

DELETE

Clear

Format

Get auto-saved query

Hide query box

1 row inserted. (Query took 0.0004 seconds.)

```
INSERT INTO TRANS (TransactionID, DateAcquired, AcquisitionPrice, AskingPrice, DateSold, SalesPrice, CustomerID, WorkID) VALUES
(255, '2014-11-08', 200.00, NULL, NULL, NULL, NULL, 500);
```

Edit inline Edit Create PHP code

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

```
SELECT * FROM `trans`
```

Profiling Edit inline Edit Explain SQL Create PHP code Refresh

<< < 2 Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

TransactionID DateAcquired AcquisitionPrice AskingPrice DateSold SalesPrice CustomerID WorkID

Edit Copy Delete

225 2020-06-08 125.00 250.00 2020-09-27 225.00 1051 585

Edit Copy Delete

226 2020-06-08 200.00 400.00 NULL NULL NULL 586

Edit Copy Delete

227 2020-06-08 250.00 500.00 2020-09-27 475.00 1051 587

Edit Copy Delete

228 2020-06-08 250.00 500.00 NULL NULL NULL 588

Edit Copy Delete

229 2020-06-08 250.00 500.00 NULL NULL NULL 589

Edit Copy Delete

241 2020-08-29 2500.00 5000.00 2020-09-27 4750.00 1015 590

Edit Copy Delete

251 2020-10-25 25000.00 50000.00 NULL NULL NULL 593

Edit Copy Delete

252 2020-10-27 250.00 500.00 NULL NULL NULL 594

Edit Copy Delete

253 2020-10-27 250.00 500.00 NULL NULL NULL 595

Edit Copy Delete

254 2020-10-27 250.00 500.00 NULL NULL NULL 596

Edit Copy Delete

255 2014-11-08 200.00 NULL NULL NULL NULL 500

Triggers

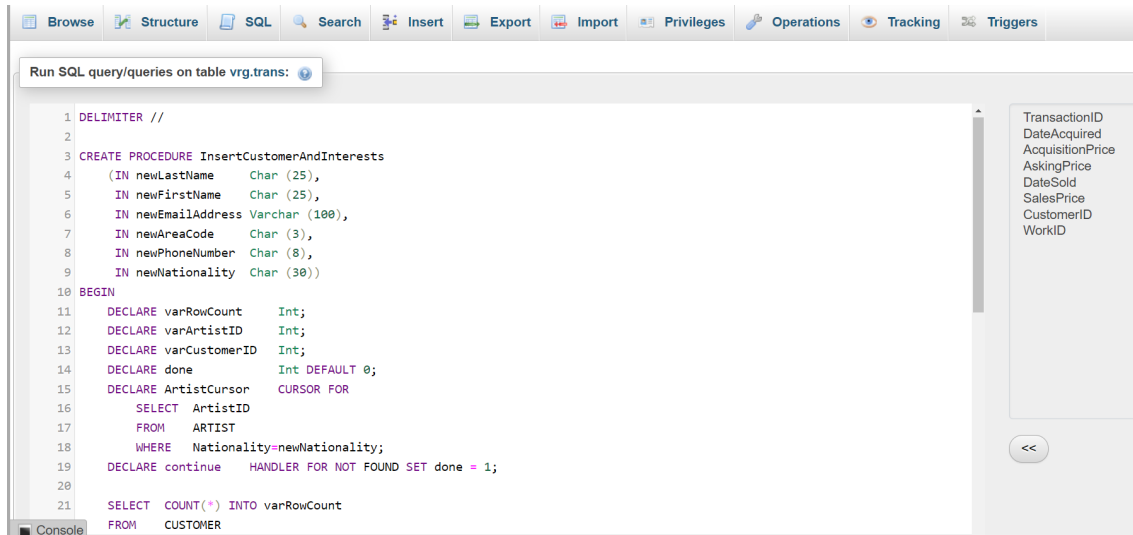
Check all

Export

Drop

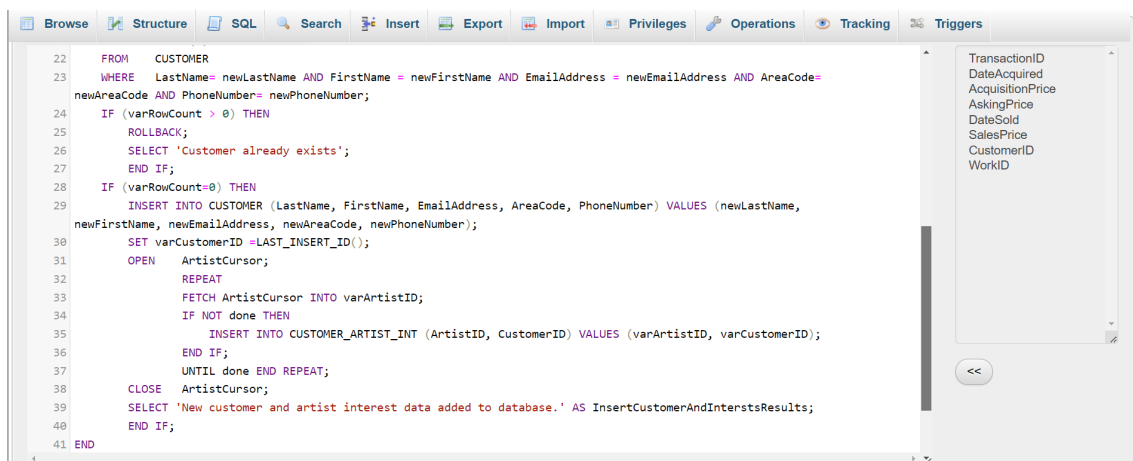
	Name	Time	Event
<input type="checkbox"/>	TRANS_AskingPriceInitialValue	AFTER INSERT	<div><div>Edit</div><div>Export</div><div>Drop</div></div>

4. [10pt] Create the **InsertCustomerAndInterests** procedure and submit 1) [5pt] a screenshot of **SQL** creating the view, and 2) [5pt] a screenshot of the **test result**.



Run SQL query/queries on table vrg.trans:

```
1 DELIMITER //
2
3 CREATE PROCEDURE InsertCustomerAndInterests
4 (IN newLastName Char (25),
5  IN newFirstName Char (25),
6  IN newEmailAddress Varchar (100),
7  IN newAreaCode Char (3),
8  IN newPhoneNumber Char (8),
9  IN newNationality Char (30))
10 BEGIN
11     DECLARE varRowCount Int;
12     DECLARE varArtistID Int;
13     DECLARE varCustomerID Int;
14     DECLARE done Int DEFAULT 0;
15     DECLARE ArtistCursor CURSOR FOR
16     SELECT ArtistID
17     FROM ARTIST
18     WHERE Nationality=newNationality;
19     DECLARE continue HANDLER FOR NOT FOUND SET done = 1;
20
21     SELECT COUNT(*) INTO varRowCount
22     FROM CUSTOMER
```



```
23 WHERE LastName= newLastName AND FirstName = newFirstName AND EmailAddress = newEmailAddress AND AreaCode=
24 newAreaCode AND PhoneNumber= newPhoneNumber;
25 IF (varRowCount > 0) THEN
26     ROLLBACK;
27     SELECT 'Customer already exists';
28     END IF;
29 IF (varRowCount=0) THEN
30     INSERT INTO CUSTOMER (LastName, FirstName, EmailAddress, AreaCode, PhoneNumber) VALUES (newLastName,
31     newFirstName, newEmailAddress, newAreaCode, newPhoneNumber);
32     SET varCustomerID =LAST_INSERT_ID();
33     OPEN ArtistCursor;
34     REPEAT
35     FETCH ArtistCursor INTO varArtistID;
36     IF NOT done THEN
37         INSERT INTO CUSTOMER_ARTIST_INT (ArtistID, CustomerID) VALUES (varArtistID, varCustomerID);
38     END IF;
39     UNTIL done END REPEAT;
40     CLOSE ArtistCursor;
41     SELECT 'New customer and artist interest data added to database.' AS InsertCustomerAndInterestsResults;
42 END IF;
43 END
```



```
26 SELECT 'Customer already exists';
27 END IF;
28 IF (varRowCount=0) THEN
29     INSERT INTO CUSTOMER (LastName, FirstName, EmailAddress, AreaCode, PhoneNumber) VALUES (newLastName,
30     newFirstName, newEmailAddress, newAreaCode, newPhoneNumber);
31     SET varCustomerID =LAST_INSERT_ID();
32     OPEN ArtistCursor;
33     REPEAT
34     FETCH ArtistCursor INTO varArtistID;
35     IF NOT done THEN
36         INSERT INTO CUSTOMER_ARTIST_INT (ArtistID, CustomerID) VALUES (varArtistID, varCustomerID);
37     END IF;
38     UNTIL done END REPEAT;
39     CLOSE ArtistCursor;
40     SELECT 'New customer and artist interest data added to database.' AS InsertCustomerAndInterestsResults;
41     END IF;
42 END
43 //
44 DELIMITER ;
```

SHOW query v0A

⚠️ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available. ⓘ

✔️ Showing rows 0 - 0 (1 total, Query took 0.0028 seconds.)

CALL InsertCustomerAndInterests('Captain', 'Empire', 'aaa@test.com', '500', '1000-250', 'The Empire');

[Edit inline] [Edit] [Create PHP code]

☐ Show all

Number of rows: 25

Filter rows: Search this table

Extra options

InsertCustomerAndInterestsResults
New customer and artist interest data added to dat...

☐ Show all

Number of rows: 25

Filter rows: Search this table

Query results operations

✔️ Showing rows 0 - 10 (11 total, Query took 0.0002 seconds.)

SELECT * FROM `customer`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

	CustomerID	LastName	FirstName	EmailAddress	EncryptedPassword	Street	City	State	ZIPorPostalCode
<input type="checkbox"/> Edit Copy Delete	1001	Smith	David	David.Smith@somewhere.com	ttr67i23	Tumbleweed Lane	Loveland	CO	81201
<input type="checkbox"/> Edit Copy Delete	1015	Twilight	Tiffany	Tiffany.Twilight@somewhere.com	gr44t5uz	88 1st Avenue	Langley	WA	98260
<input type="checkbox"/> Edit Copy Delete	1033	Smathers	Fred	Fred.Smathers@somewhere.com	mnF3D00Q	10899 88th Ave	Bainbridge Island	WA	98110
<input type="checkbox"/> Edit Copy Delete	1034	Frederickson	Mary Beth	MaryBeth.Frederickson@somewhere.com	Nd5qr4Tv	25 South Lafayette	Denver	CO	80201
<input type="checkbox"/> Edit Copy Delete	1036	Warning	Selma	Selma.Warning@somewhere.com	CAe3Gh98	205 Burnaby	Vancouver	BC	V6Z 1W2
<input type="checkbox"/> Edit Copy Delete	1037	Wu	Susan	Susan.Wu@somewhere.com	Ues3thQ2	105 Locust Ave	Atlanta	GA	30322
<input type="checkbox"/> Edit Copy Delete	1040	Gray	Donald	Donald.Gray@somewhere.com	NULL	55 Bodega Ave	Bodega Bay	CA	94923
<input type="checkbox"/> Edit Copy Delete	1041	Johnson	Lynda	NULL	NULL	117 C Street	Washington	DC	20003
<input type="checkbox"/> Edit Copy Delete	1051	Wilkens	Chris	Chris.Wilkens@somewhere.com	45OZjx59	87 Highland Drive	Olympia	WA	98508
<input type="checkbox"/> Edit Copy Delete	1052	Captain	Empire	aaa@test.com	NULL	NULL	NULL	NULL	NULL

phpMyAdmin

Server: 127.0.0.1 > Database: vrg

Structure SQL Search Query Export Import Operations Privileges Routines More

Details

Routine name: InsertCustomerAndInterest

Type: PROCEDURE

Type: Change to FUNCTION

	Direction	Name	Type	Length/Values	Options
Parameters	IN	newLastName	CHAR	25	Charset
	IN	newFirstName	CHAR	25	Charset
	IN	newEmailAddress	VARCHAR	100	Charset
	IN	newAreaCode	CHAR	3	Charset
	IN	newPhoneNumber	CHAR	8	Charset
	IN	newNationality	CHAR	30	Charset

Add parameter Remove last parameter

Console

BEGIN