

NCC Level-5DC Diploma in Computing

Database Design and Development



Candidates Name : Fatema Akter

ID No : 00154713

Module Title : Database Design and Development

Assignment Title : Forest Film

Examination Cycle: June 2016

Candidate attempting to gain an unfair advantage or colluding in anyway whatsoever (other than on joint assignments) are liable to be disqualified. Plagiarism is an offence.

Expected candidate time allocation: 35 to 40 hours

Mark	Moderated	Final
	Mark	Mark

Marker's comment:

Moderator's comment:

Statement of Confirmation of Own Work

Programmed /qualification name: Database Design and Development

Student Declaration:

I have read and understood the NCC Education's policy on Academic Dishonesty and Plagiarism.

I can confirm the following details:

Student ID/Registration number : 00154713

Name : Fatema Akter

Center Name : Daffodil International Academy.

Module Name : Database Design and Development

Assignment Title : Forest Film

Number of Words : 1,532

I confirm that this is my own and that I have not plagiarized any part of it. I have also noted the assessment criteria and pass mark for assignments.

Due Date: 12/04/2016

Submitted Date: 11/04/2016

Student Signature: Fatema Akter

ACKNOWLEDGEMENT

At the beginning I would like to render thanks to the almighty Allah. And so I would wish to show my special thanks, gratitude to my teacher **Mr. Shomon Hossian** well as all other teachers. I did a great deal of research and I came to know about so many recalls and it helped to increase my knowledge.

Once more, I would wish to give thanks all of them who helped me to complete this Assignment.

Table of Contents

Introduction:	5
Task-1	6
Design:	6
(a) Entity Relationship Model:	6
(b) Show Normalizations Process:	7
(c) Data Dictionary for Entity relationship Model:.....	10
Task-2	11
Data and Queries:.....	11
(a) Data for all production, customer and staff type:	11
(b) Data for location:.....	15
(c) Data on the properties and the location they are used at on a production:	18
(d) Data for property types:	22
(e) Query for selected all the production and which staff type have worked:	24
(f) Query for selected the properties that are actually used on a production:.....	25
(g) Query for selected all the location and the production that have taken place at those location:.....	26
(h) Query for show the productions, location and properties:.....	27
(i) Quire count of number of location for production:	28
(j) Update the daily rate pay for runner:	29
(k) Update name of “Epom Motors” to Epom Vehicle Management:.....	31
(l) Update record for five actor:	32
(m) Add new staff type “Digital Effect supervisor”:.....	34
(Connolly, 2005)Task-3	35
Task-3	36
Derived Data:.....	36
Task-4	44
Evaluation:	44
Assignment requirement:.....	44
Conclusion:	46
Bibliography	47

Introduction:

Now I am going to speak assignment ***Database Design and development***, in this assignment topic the ***Forest File***. The assignment ***contains four parts***, such as ***Task-1: Design, Task-2: Data and queries Task-3: Derived data and Task-4: Evaluation***. This assignment wills opportunity me to show my ***knowledge*** and understanding of ***Database Design and development***.

Task-1

Design:

(a) Entity Relationship Model:

Record for the entity name:

Here I have used some entity in this database model including this:

- Client_tab
- Location_tab
- Production_property_tab
- Production_staff_tab
- Production_tab
- Product_tab
- Properties_tab
- Staff_tab

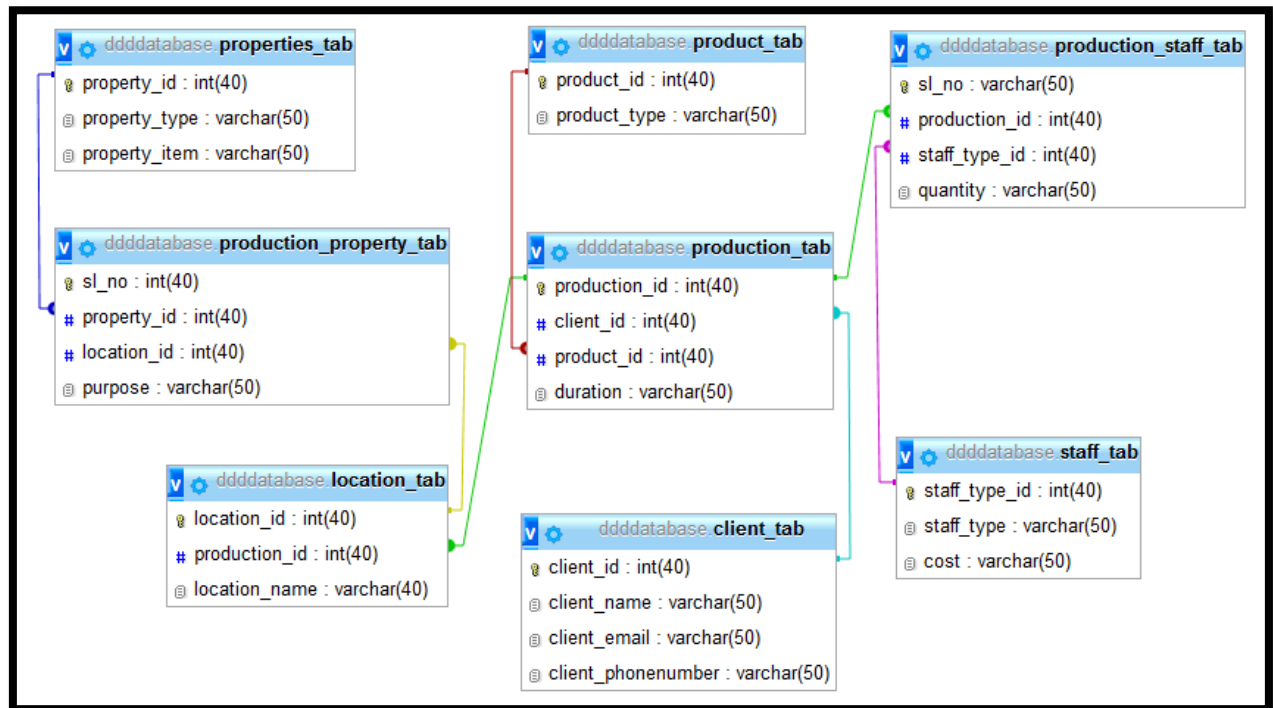


Fig. 1

(b) Show Normalizations Process:

Normalization:

This process of moving from data is not in a relation from, to a relation, and finally to a set of ideal relation is known as normalization. There are **three type of normalization** from. Including this:

- **1st Normalization**
- **2nd Normalization and**
- **3rd Normalization**

Here I have described all three normalization. Flow this:

- **1st Normalization:**
 - 1st normalization means data will be **without duplication**.
 - Because duplication data is big problem for database system. Such as **wastes space** and **compromising data integrity**.
 - This database does not use any duplication data. We know that this process is 1st normalization.

For Example:

+ Options					sl_no	production_id	staff_type_id	quantity
<input type="checkbox"/>		Edit		Copy		Delete	1	2
<input type="checkbox"/>		Edit		Copy		Delete	10	7
<input type="checkbox"/>		Edit		Copy		Delete	11	7
<input type="checkbox"/>		Edit		Copy		Delete	12	7
<input type="checkbox"/>		Edit		Copy		Delete	2	2
<input type="checkbox"/>		Edit		Copy		Delete	3	2
<input type="checkbox"/>		Edit		Copy		Delete	4	2
<input type="checkbox"/>		Edit		Copy		Delete	5	6
<input type="checkbox"/>		Edit		Copy		Delete	6	6
<input type="checkbox"/>		Edit		Copy		Delete	7	6
<input type="checkbox"/>		Edit		Copy		Delete	8	6
<input type="checkbox"/>		Edit		Copy		Delete	9	7

Fig. 2

- **2nd Normalization:**

- 2nd normalization means database will be **primary and foreign key**.
- So this data base is 2nd normalization from database.
- Because this database have primary and foreign key.

For Example:

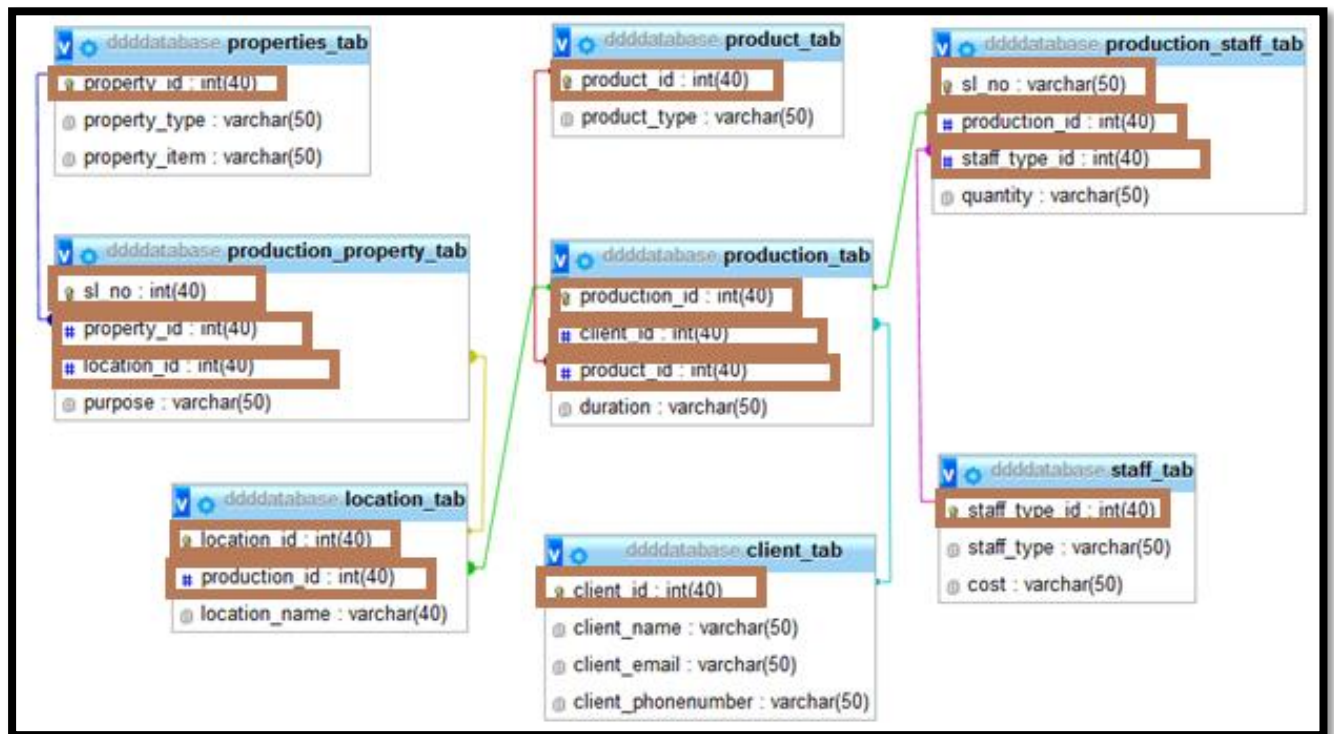


Fig. 3

- **3rd Normalization:**

- **3rd normalization** means database will be **without data dependency**.
- This database is 3rd normalization from because this data base **does not use data dependency**.

(Connolly, n.d.)

For Example:

+ Options				
← T →				
	production_id	client_id	product_id	duration
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	1	1	5
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	2	2	1
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	2	3	2

Fig. 4

+ Options				
← T →				
	client_id	client_name	client_email	client_phonenumber
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Epom Motors	e_pom@gmail.com	+19293652546
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Ministry of Agriculture, Fisheries and Food	ministry_agriculture@gmail.com	+19293652547

Fig. 5

(c) Data Dictionary for Entity relationship Model:

Entity Name	Attributes	Length	Key	Type
Client_tab	client_id	40	PRIMARY KEY	int
	client_name	50	NOT NULL	varchar
	email_email	50	NOT NULL	varchar
	client_phonenumber	50	NOT NULL	varchar
location_tab	location_id	40	PRIMARY KEY	int
	production_id	40	FOREIGN KEY	int
	location_name	40	NOT NULL	varchar
production_property_tab	sl_no	40	PRIMARY KEY	int
	property_id	40	FOREIGN KEY	int
	location_id	40	FOREIGN KEY	int
	purpose	50	NOT NULL	varchar
production_staff_tab	sl_no	50	PRIMARY KEY	varchar
	production_id	40	FOREIGN KEY	int
	staff_type_id	40	FOREIGN KEY	int
	quantity	50	NOT NULL	varchar
production_tab	production_id	40	PRIMARY KEY	int
	client_id	40	FOREIGN KEY	int
	product_id	40	FOREIGN KEY	int
	duration	50	NOT NULL	varchar
product_tab	product_id	40	PRIMARY KEY	int
	product_type	50	NOT NULL	varchar
properties_tab	property_id	40	PRIMARY KEY	int
	property_type	50	NOT NULL	varchar
	property_item	50	NOT NULL	varchar
staff_tab	staff_type_id	40	PRIMARY KEY	int
	staff_type	50	NOT NULL	varchar
	cost	50	NOT NULL	varchar

Fig. 6

Task-2

Data and Queries:

(a) Data for all production, customer and staff type:

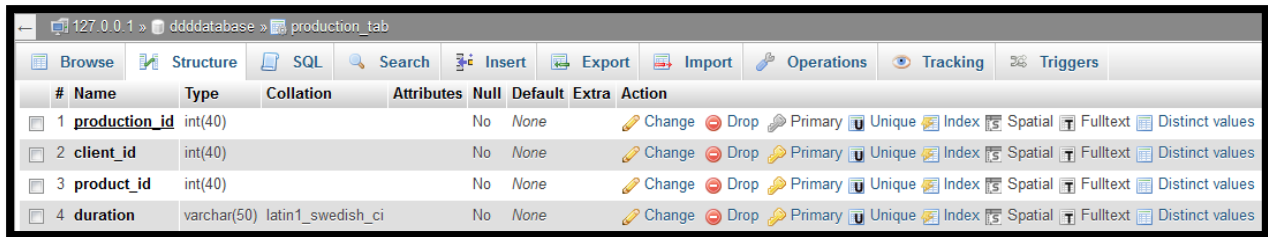
“production_tab” Table:

- Alter Table code for “*production_tab*”

```
ALTER TABLE `production_tab`  
  ADD CONSTRAINT `production_tab_ibfk_1` FOREIGN KEY (`client_id`) REFERENCES `client_tab` (`client_id`),  
  ADD CONSTRAINT `production_tab_ibfk_2` FOREIGN KEY (`product_id`) REFERENCES `product_tab` (`product_id`);
```

Fig. 7

- Table for “*production_tab*”



The screenshot shows a database management interface with a table structure view for 'production_tab'. The table has four columns: production_id, client_id, product_id, and duration. Each column is an integer (40) or varchar (50) type, with a primary key constraint on production_id. The interface includes a toolbar with options like Browse, Structure, SQL, Search, Insert, Export, Import, Operations, Tracking, and Triggers. The table structure is displayed in a table format with columns for #, Name, Type, Collation, Attributes, Null, Default, Extra, and Action.

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	production_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	client_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	product_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
4	duration	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Fig. 8

- Insert values for “*production_tab*”

```
INSERT INTO `production_tab` (`production_id`, `client_id`, `product_id`, `duration`) VALUES  
(2, 1, 1, '5'),  
(6, 2, 2, '1'),  
(7, 2, 3, '2');
```

Fig. 9

- **Output** values for “*production_tab*”

+ Options

		production_id	client_id	product_id	duration
<input type="checkbox"/>	Edit Copy Delete	2	1	1	5
<input type="checkbox"/>	Edit Copy Delete	6	2	2	1
<input type="checkbox"/>	Edit Copy Delete	7	2	3	2

Fig. 10

- Code for “*production_tab*”

```
CREATE TABLE IF NOT EXISTS `production_tab` (
  `production_id` int(40) NOT NULL,
  `client_id` int(40) NOT NULL,
  `product_id` int(40) NOT NULL,
  `duration` varchar(50) NOT NULL,
  PRIMARY KEY (`production_id`),
  KEY `client_id` (`client_id`),
  KEY `product_id` (`product_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 11

“client_tab” Table:

- Table for “*client_tab*”

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	client_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext More
2	client_name	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext More
3	client_email	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext More
4	client_phonenumber	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext More

Fig. 12

- **Insert** values for “*client_tab*”

```
INSERT INTO `client_tab` (`client_id`, `client_name`, `client_email`, `client_phonenumber`) VALUES
(1, 'Epom Motors', 'e_pom@gmail.com', '+19293652546'),
(2, 'Ministry ofAgriculture,Fisheriesand Food', 'ministry_agriculture@gmail.com', '+19293652547');
```

Fig. 13

- **Output** values for “*client_tab*”

+ Options				
	client_id	client_name	client_email	client_phonenumber
Edit Copy Delete	1	Epom Motors	e_pom@gmail.com	+19293652546
Edit Copy Delete	2	Ministry ofAgriculture,Fisheriesand Food	ministry_agriculture@gmail.com	+19293652547

Fig. 14

- Code for “*client_tab*”

```
CREATE TABLE IF NOT EXISTS `client_tab` (
  `client_id` int(40) NOT NULL,
  `client_name` varchar(50) NOT NULL,
  `client_email` varchar(50) NOT NULL,
  `client_phonenumber` varchar(50) NOT NULL,
  PRIMARY KEY (`client_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 15

“staff_tab” Table:

- Table for “*staff_tab*”

127.0.0.1 » ddddatabase » staff_tab											
Browse Structure SQL Search Insert Export Import Operations Tracking Triggers											
#	Name	Type	Collation	Attributes	Null	Default	Extra	Action			
1	staff_type_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values			
2	staff_type	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values			
3	cost	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values			

Fig. 16

- **Insert** values for “*staff_tab*”

```
INSERT INTO `staff_tab` (`staff_type_id`, `staff_type`, `cost`) VALUES
(1, 'Camera Crew', '100'),
(2, 'Runner', '25'),
(3, 'Actor', '200'),
(4, 'Voice Actor', '100'),
(5, 'Producer', '550');
```

Fig. 17

- **Output** values for “*staff_tab*”

+ Options					staff_type_id	staff_type	cost
<div><div><div>↔</div><div>T</div><div>→</div></div><div>▼</div></div>							
<input type="checkbox"/>		Edit	Copy	Delete	1	Camera Crew	100
<input type="checkbox"/>		Edit	Copy	Delete	2	Runner	25
<input type="checkbox"/>		Edit	Copy	Delete	3	Actor	200
<input type="checkbox"/>		Edit	Copy	Delete	4	Voice Actor	100
<input type="checkbox"/>		Edit	Copy	Delete	5	Producer	550

Fig. 18

- code for “*staff_tab*”

```
CREATE TABLE IF NOT EXISTS `staff_tab` (
  `staff_type_id` int(40) NOT NULL,
  `staff_type` varchar(50) NOT NULL,
  `cost` varchar(50) NOT NULL,
  PRIMARY KEY (`staff_type_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 19

(b) Data for location:

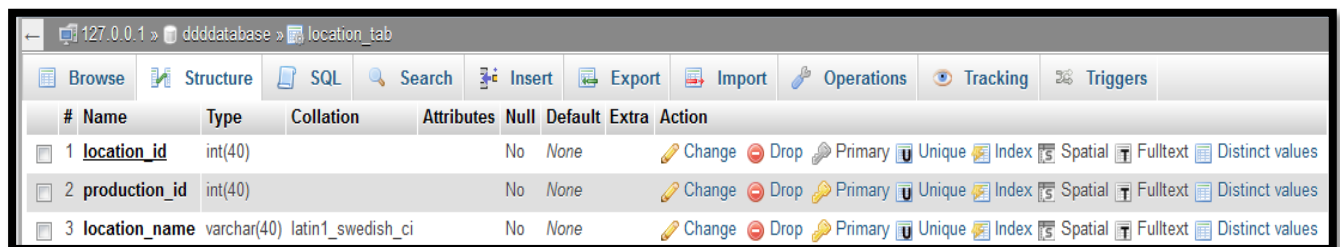
“location_tab” Table:

- **Alter** table code for “location_tab”

```
ALTER TABLE `location_tab`  
ADD CONSTRAINT `location_tab_ibfk_1` FOREIGN KEY (`production_id`) REFERENCES `production_tab` (`production_id`);
```

Fig. 20

- Table for “location_tab”



#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	location_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	production_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	location_name	varchar(40)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Fig. 21

- **Insert** values for “location_tab”

```
INSERT INTO `location_tab` (`location_id`, `production_id`, `location_name`) VALUES  
(1, 2, 'Millwall Park, Isleof Dogs, London'),  
(2, 2, 'Windsor Castle, Grounds'),  
(3, 6, 'Orford Ness, Suffolk'),  
(4, 6, 'Rancid Attic Studio'),  
(5, 7, 'St Jamess Park, London');
```

Fig. 22

- **Output** values for “*location_tab*”

+ Options			
	location_id	production_id	location_name
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	2	Millwall Park, Isleof Dogs, London
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	2	Windsor Castle, Grounds
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	6	Orford Ness, Suffolk
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	6	Rancid Attic Studio
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	7	St Jamess Park, London

Fig. 23

- Code for “*location_tab*”

```
CREATE TABLE IF NOT EXISTS `location_tab` (
  `location_id` int(40) NOT NULL,
  `production_id` int(40) NOT NULL,
  `location_name` varchar(40) NOT NULL,
  PRIMARY KEY (`location_id`),
  KEY `production_id` (`production_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 24

“*product_tab*” Table:

- Table for “*product_tab*”

127.0.0.1 » ddddatabase » product_tab									
Browse Structure SQL Search Insert Export Import Operations Tracking Triggers									
#	Name	Type	Collation	Attributes	Null	Default	Extra	Action	
1	product_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values	
2	product_type	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values	

Fig. 25

- **Insert** values for “*product_tab*”

```
INSERT INTO `product_tab` (`product_id`, `product_type`) VALUES
(1, 'Advertisement'),
(2, 'InformationFilm'),
(3, 'Training Film');
```

Fig. 26

- **output** values for “*product_tab*”

+ Options				product_id	product_type			
		Edit		Copy		Delete	1	Advertisement
		Edit		Copy		Delete	2	InformationFilm
		Edit		Copy		Delete	3	Training Film

Fig. 27

- code for “*product_tab*”

```
CREATE TABLE IF NOT EXISTS `product_tab` (
  `product_id` int(40) NOT NULL,
  `product_type` varchar(50) NOT NULL,
  PRIMARY KEY (`product_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 28

(c) Data on the properties and the location they are used at on a production:

“properties_tab” Table:

- Table for “*properties_tab*”

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	property_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	property_type	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	property_item	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Fig. 29

- Insert* values for “*properties_tab*”

```
INSERT INTO `properties_tab` (`property_id`, `property_type`, `property_item`) VALUES
(1, 'Vehicle', 'Car'),
(2, 'Vehicle', 'Tractor'),
(3, 'Vehicle', 'Boat'),
(4, 'Furniture', 'Chair'),
(5, 'Furniture', 'Table'),
(6, 'Building', 'Suburban House'),
(7, 'Building', 'Inner City House');
```

Fig. 30

- Output* values for “*properties_tab*”

property_id	property_type	property_item
1	Vehicle	Car
2	Vehicle	Tractor
3	Vehicle	Boat
4	Furniture	Chair
5	Furniture	Table
6	Building	Suburban House
7	Building	Inner City House

Fig. 31

- Code for “*properties_tab*”

```
CREATE TABLE IF NOT EXISTS `properties_tab` (
  `property_id` int(40) NOT NULL,
  `property_type` varchar(50) NOT NULL,
  `property_item` varchar(50) NOT NULL,
  PRIMARY KEY (`property_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 32

“*production_staff_tab*” Table:

- **Alter** Table code for “*production_staff_tab*”

```
ALTER TABLE `production_staff_tab`
ADD CONSTRAINT `production_staff_tab_ibfk_1` FOREIGN KEY (`production_id`) REFERENCES `production_tab` (`production_id`),
ADD CONSTRAINT `production_staff_tab_ibfk_2` FOREIGN KEY (`staff_type_id`) REFERENCES `staff_tab` (`staff_type_id`);
```

Fig. 33

- Table for “*production_staff_tab*”

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	sl_no	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	production_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	staff_type_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
4	quantity	varchar(50)	latin1_swedish_ci		No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Fig. 34

- **Insert** values for “*production_staff_tab*”

```
INSERT INTO `production_staff_tab` (`sl_no`, `production_id`, `staff_type_id`, `quantity`) VALUES
('1', 2, 1, '2'),
('10', 7, 2, '1'),
('11', 7, 5, '1'),
('12', 7, 4, '1'),
('2', 2, 2, '1'),
('3', 2, 3, '3'),
('4', 2, 5, '1'),
('5', 6, 1, '2'),
('6', 6, 2, '1'),
('7', 6, 5, '1'),
('8', 6, 4, '1'),
('9', 7, 1, '2');
```

Fig. 35

- **Output** values for “*production_staff_tab*”

+ Options					sl_no	production_id	staff_type_id	quantity
<input type="checkbox"/>		Edit		Copy		Delete	1	
<input type="checkbox"/>		Edit		Copy		Delete	10	
<input type="checkbox"/>		Edit		Copy		Delete	11	
<input type="checkbox"/>		Edit		Copy		Delete	12	
<input type="checkbox"/>		Edit		Copy		Delete	2	
<input type="checkbox"/>		Edit		Copy		Delete	3	
<input type="checkbox"/>		Edit		Copy		Delete	4	
<input type="checkbox"/>		Edit		Copy		Delete	5	
<input type="checkbox"/>		Edit		Copy		Delete	6	
<input type="checkbox"/>		Edit		Copy		Delete	7	
<input type="checkbox"/>		Edit		Copy		Delete	8	
<input type="checkbox"/>		Edit		Copy		Delete	9	

Fig. 36

- Code for “*production_staff_tab*”

```
CREATE TABLE IF NOT EXISTS `production_staff_tab` (  
  `sl_no` varchar(50) NOT NULL,  
  `production_id` int(40) NOT NULL,  
  `staff_type_id` int(40) NOT NULL,  
  `quantity` varchar(50) NOT NULL,  
  PRIMARY KEY (`sl_no`),  
  KEY `production_id` (`production_id`),  
  KEY `staff_type_id` (`staff_type_id`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 37

(d) Data for property types:

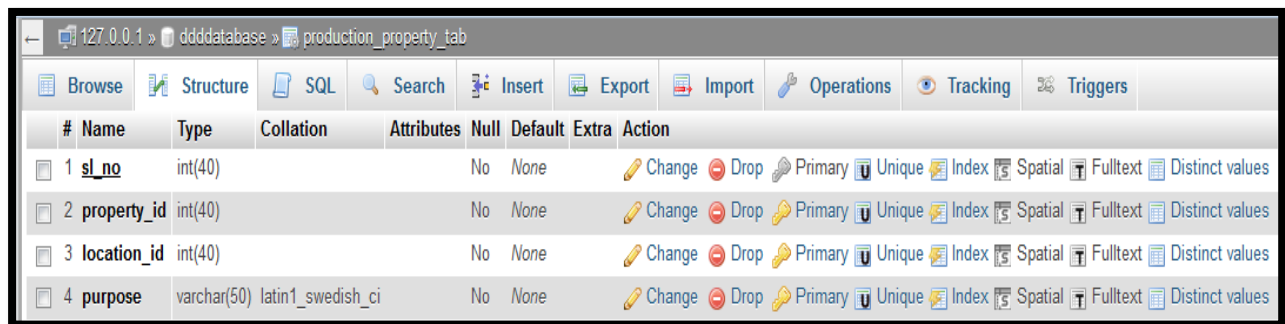
“production_property_tab” Table:

- **Alter** Table code for “production_property_tab”

```
ALTER TABLE `production_property_tab`  
  ADD CONSTRAINT `production_property_tab_ibfk_1` FOREIGN KEY (`property_id`) REFERENCES `properties_tab` (`property_id`),  
  ADD CONSTRAINT `production_property_tab_ibfk_2` FOREIGN KEY (`location_id`) REFERENCES `location_tab` (`location_id`);
```

Fig. 38

- Table for “production_property_tab”



The screenshot shows a database management interface with a table structure view for 'production_property_tab'. The table has four columns: 'sl_no' (int(40)), 'property_id' (int(40)), 'location_id' (int(40)), and 'purpose' (varchar(50) latin1_swedish_ci). Each column is marked as 'No' for null and 'None' for default. The 'property_id' and 'location_id' columns are marked as 'Primary' and 'Unique' respectively. The 'purpose' column is marked as 'Primary' and 'Unique'.

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	sl_no	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
2	property_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
3	location_id	int(40)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values
4	purpose	varchar(50) latin1_swedish_ci			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values

Fig. 39

- **Insert** values for “production_property_tab”

```
INSERT INTO `production_property_tab` (`sl_no`, `property_id`, `location_id`, `purpose`) VALUES  
(1, 1, 1, 'Wrecked'),  
(2, 1, 2, 'Rent'),  
(3, 1, 3, 'Rent'),  
(4, 2, 5, 'Rent');
```

Fig. 40

- **Output** values for “*production_property_tab*”

+ Options						sl_no	property_id	location_id	purpose	
		Edit		Copy		Delete	1	1	1	Wrecked
		Edit		Copy		Delete	2	1	2	Rent
		Edit		Copy		Delete	3	1	3	Rent
		Edit		Copy		Delete	4	2	5	Rent

Fig. 41

- Code for “*production_property_tab*”

```
CREATE TABLE IF NOT EXISTS `production_property_tab` (
  `sl_no` int(40) NOT NULL,
  `property_id` int(40) NOT NULL,
  `location_id` int(40) NOT NULL,
  `purpose` varchar(50) NOT NULL,
  PRIMARY KEY (`sl_no`),
  KEY `property_id` (`property_id`),
  KEY `location_id` (`location_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Fig. 42

(Palgrave, n.d.)

(e) Query for selected all the production and which staff type have worked:

- Screen short for query **code**

```
1 SELECT `production_id`, staff_type, `quantity`  
2 FROM production_staff_tab ps, staff_tab st  
3 WHERE ps.staff_type_id=st.staff_type_id
```

Fig. 43

- **Run** successfully

✓ Showing rows 0 - 11 (12 total, Query took 0.0000 sec)

```
SELECT `production_id` , staff_type, `quantity`  
FROM production_staff_tab ps, staff_tab st  
WHERE ps.staff_type_id = st.staff_type_id  
LIMIT 0 , 30
```

Fig. 44

- **Output** values

+ Options		
production_id	staff_type	quantity
2	Camera Crew	2
6	Camera Crew	2
7	Camera Crew	2
7	Runner	1
2	Runner	1
6	Runner	1
2	Actor	3
7	Voice Actor	1
6	Voice Actor	1
7	Producer	1
2	Producer	1
6	Producer	1

Fig. 45

(f) Query for selected the properties that are actually used on a production:

- Screen short for query *code*

```
1 SELECT pt.property_id, `property_type`, `property_item`  
2 FROM `properties_tab` pt, production_property_tab pp  
3 where pt.property_id=pp.property_id
```

Fig. 46

- **Run** successfully

✓ Showing rows 0 - 3 (4 total, Query took 0.0000 sec)

```
SELECT pt.property_id, `property_type`, `property_item`  
FROM `properties_tab` pt, production_property_tab pp  
WHERE pt.property_id = pp.property_id  
LIMIT 0 , 30
```

Fig. 47

- **Output** values

+ Options				property_id	property_type	property_item
<input type="checkbox"/>		Edit		Copy		Delete
	2	Vehicle	Tractor			
<input type="checkbox"/>		Edit		Copy		Delete
	2	Vehicle	Tractor			
<input type="checkbox"/>		Edit		Copy		Delete
	2	Vehicle	Tractor			
<input type="checkbox"/>		Edit		Copy		Delete
	2	Vehicle	Tractor			

Fig. 48

(g) Query for selected all the location and the production that have taken place at those location:

- Screen short for query **code**

```
1 SELECT lt.location_id,lt.production_id,lt.location_name
2 FROM location_tab lt,production_property_tab pp
3 where lt.location_id=pp.location_id
```

Fig. 49

- **Run** successfully

✓ Showing rows 0 - 3 (4 total, Query took 0.0000 sec)

```
SELECT lt.location_id, lt.production_id, lt.location_name
FROM location_tab lt, production_property_tab pp
WHERE lt.location_id = pp.location_id
LIMIT 0 , 30
```

Fig. 50

- **Output** values

+ Options				
← T →				
		location_id	production_id	location_name
<input type="checkbox"/>	Edit Copy Delete	1	2	Millwall Park, Isleof Dogs, London
<input type="checkbox"/>	Edit Copy Delete	2	2	Windsor Castle, Grounds
<input type="checkbox"/>	Edit Copy Delete	3	6	Orford Ness, Suffolk
<input type="checkbox"/>	Edit Copy Delete	5	7	St Jamess Park, London

Fig. 51

(h) Query for show the productions, location and properties:

- Screen short for query *code*

```
1 SELECT lt.location_id,lt.production_id,lt.location_name,pp.property_id
2 FROM location_tab lt,production_property_tab pp
3 where lt.location_id=pp.location_id and lt.production_id=2
```

Fig. 52

- **Run** successfully

✓ Showing rows 0 - 1 (2 total, Query took 0.0000 sec)

```
SELECT lt.location_id, lt.production_id, lt.location_name, pp.property_id
FROM location_tab lt, production_property_tab pp
WHERE lt.location_id = pp.location_id
AND lt.production_id =2
LIMIT 0 , 30
```

Fig. 53

- **Output** values

+ Options			
location_id	production_id	location_name	property_id
1	2	Millwall Park, Isleof Dogs, London	1
2	2	Windsor Castle, Grounds	1

Fig. 54

(i) **Quire count of number of location for production:**

- Screen short for query **code**

```
1 SELECT count(production_id)
2 FROM `location_tab`
3 WHERE production_id=2
```

Fig. 55

- **Run** successfully

Your SQL query has been executed successfully

```
SELECT COUNT( production_id )
FROM `location_tab`
WHERE production_id =2
```

Fig. 56

- **Output** values

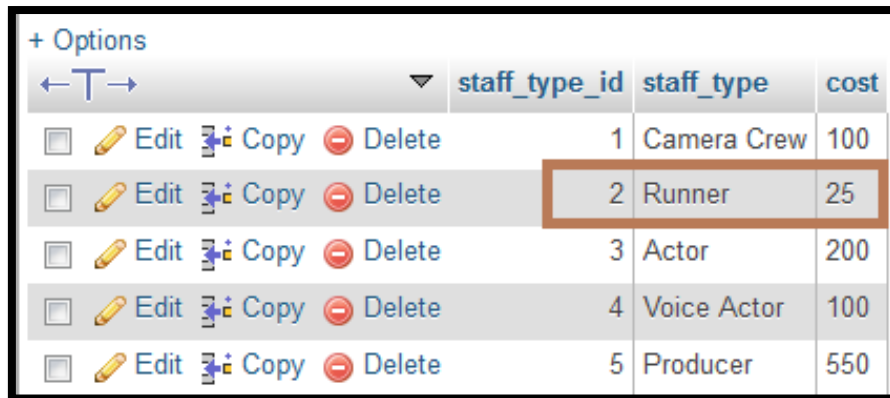
+ Options

count(production_id)
2

Fig. 57

(j) Update the daily rate pay for runner:

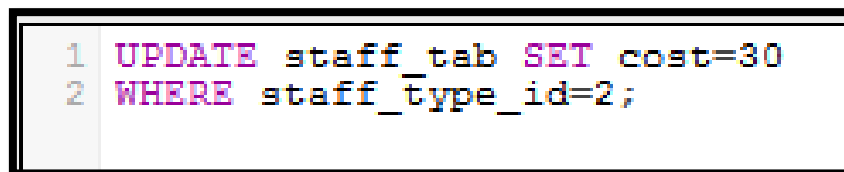
- Update for “**staff_tab**” table
- Here update **cost=30** where “**staff-type_id=2**”
- Table for before update



	staff_type_id	staff_type	cost
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Camera Crew	100
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Runner	25
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Actor	200
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Voice Actor	100
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Producer	550

Fig. 58

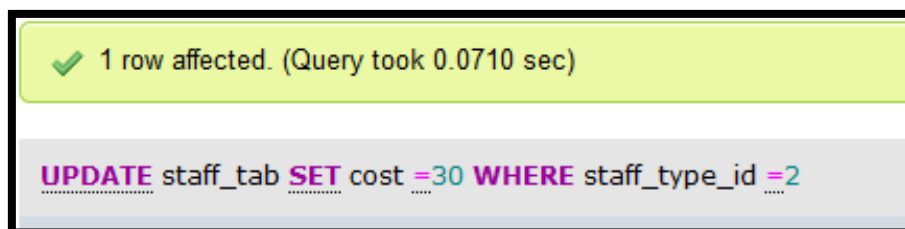
- Screen short for query **code**



```
1 UPDATE staff_tab SET cost=30
2 WHERE staff_type_id=2;
```

Fig. 59

- **Run** successfully

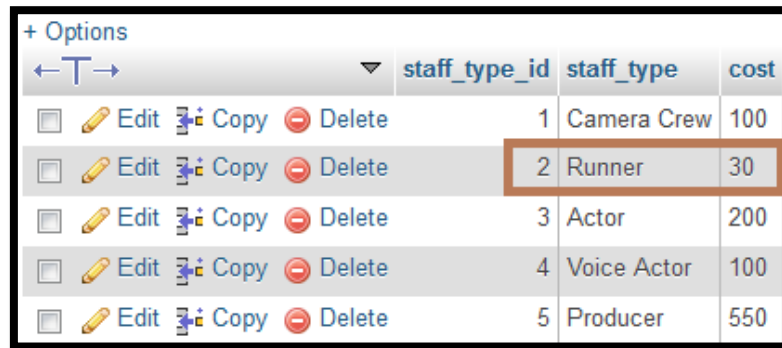


✓ 1 row affected. (Query took 0.0710 sec)

```
UPDATE staff_tab SET cost =30 WHERE staff_type_id =2
```

Fig. 60

- Screen short for ***after update***



	staff_type_id	staff_type	cost
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Camera Crew	100
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Runner	30
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Actor	200
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Voice Actor	100
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Producer	550

Fig. 61

(k) Update name of “Epom Motors” to Epom Vehicle Management:

- Update for “**client_tab**” table
- Here update “**client_name**” “**Epom Vehicale Management**” where **client_id=1**
- Table for **before update**



	client_id	client_name	client_email	client_phonenumber
1	1	Epom Motors	e_pom@gmail.com	+19293652546
2	2	Ministry ofAgriculture,Fisheriesand Food	ministry_agriculture@gmail.com	+19293652547

Fig. 62

- Screen short for query **code**

```
1 UPDATE client_tab SET client_name='Epom Vehicle Management'
2 WHERE client_id=1;
```

Fig. 63

- **Run** successfully

✓ 1 row affected. (Query took 0.0800 sec)

```
UPDATE client_tab SET client_name = 'Epom Vehicle Management' WHERE client_id = 1
```

Fig. 64

- Screen short for **after update**



	client_id	client_name	client_email	client_phonenumber
1	1	Epom Vehicle Management	e_pom@gmail.com	+19293652546
2	2	Ministry ofAgriculture,Fisheriesand Food	ministry_agriculture@gmail.com	+19293652547

Fig. 65

(I) Update record for five actor:

- Update for “**production_staff_tab**” table
- Here update “**quantity=5**” where **production_id=6** and “**staff_type_id=1**”
- Table for **before update**

+ Options					sl_no	production_id	staff_type_id	quantity
<input type="checkbox"/>		Edit		Copy		Delete	1	
<input type="checkbox"/>		Edit		Copy		Delete	10	
<input type="checkbox"/>		Edit		Copy		Delete	11	
<input type="checkbox"/>		Edit		Copy		Delete	12	
<input type="checkbox"/>		Edit		Copy		Delete	2	
<input type="checkbox"/>		Edit		Copy		Delete	3	
<input type="checkbox"/>		Edit		Copy		Delete	4	
<input type="checkbox"/>		Edit		Copy		Delete	5	
<input type="checkbox"/>		Edit		Copy		Delete	6	
<input type="checkbox"/>		Edit		Copy		Delete	7	
<input type="checkbox"/>		Edit		Copy		Delete	8	
<input type="checkbox"/>		Edit		Copy		Delete	9	

Fig. 66

- Screen short for query **code**

```
1 UPDATE production_staff_tab SET quantity=5
2 WHERE production_id=6 AND staff_type_id=4;
```

Fig. 67

- **Run** successfully

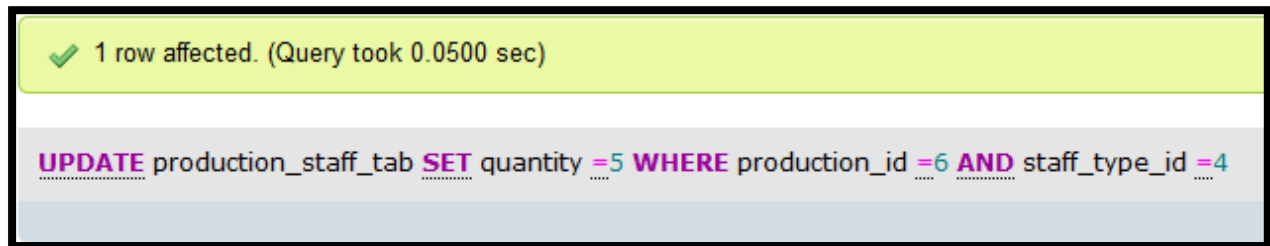


Fig. 68

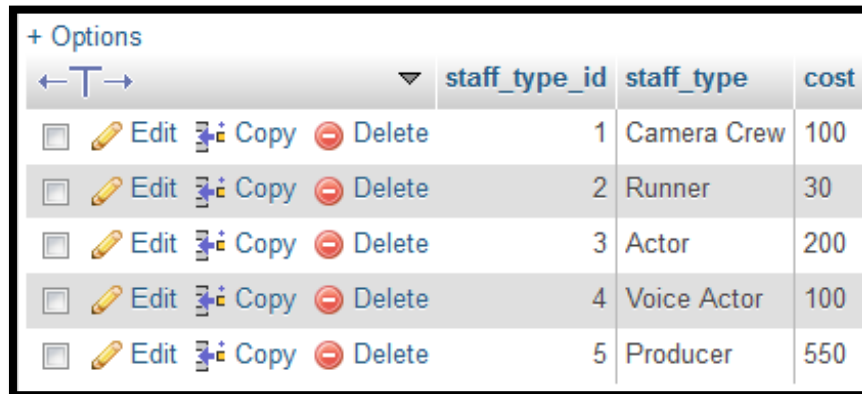
- Screen short for **after update**

+ Options					sl_no	production_id	staff_type_id	quantity
<input type="checkbox"/>		Edit		Copy		Delete	1	2
<input type="checkbox"/>		Edit		Copy		Delete	10	1
<input type="checkbox"/>		Edit		Copy		Delete	11	1
<input type="checkbox"/>		Edit		Copy		Delete	12	1
<input type="checkbox"/>		Edit		Copy		Delete	2	1
<input type="checkbox"/>		Edit		Copy		Delete	3	3
<input type="checkbox"/>		Edit		Copy		Delete	4	1
<input type="checkbox"/>		Edit		Copy		Delete	5	2
<input type="checkbox"/>		Edit		Copy		Delete	6	1
<input type="checkbox"/>		Edit		Copy		Delete	7	1
<input type="checkbox"/>		Edit		Copy		Delete	8	5
<input type="checkbox"/>		Edit		Copy		Delete	9	2

Fig. 69

(m) Add new staff type “Digital Effect supervisor”:

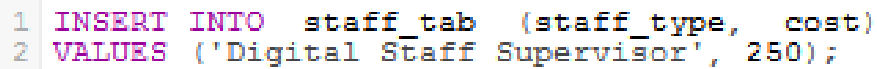
- Add for “**staff_tab**” table
- Here add “**staff_type**” and **cost** where values “**staff_type**” “**Digital Effect supervisor**”, and **cost** 250
- Table for **before Add**



	staff_type_id	staff_type	cost
<input type="checkbox"/> Edit Copy Delete	1	Camera Crew	100
<input type="checkbox"/> Edit Copy Delete	2	Runner	30
<input type="checkbox"/> Edit Copy Delete	3	Actor	200
<input type="checkbox"/> Edit Copy Delete	4	Voice Actor	100
<input type="checkbox"/> Edit Copy Delete	5	Producer	550

Fig. 70

- Screen short for query **code**



```
1 INSERT INTO staff_tab (staff_type, cost)
2 VALUES ('Digital Staff Supervisor', 250);
```

Fig. 71

- **Run** successfully

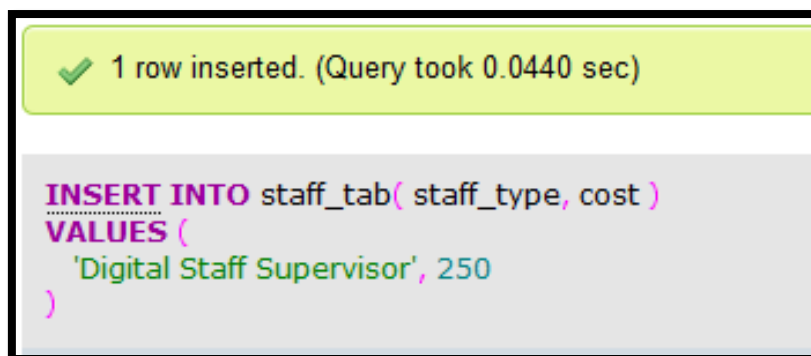
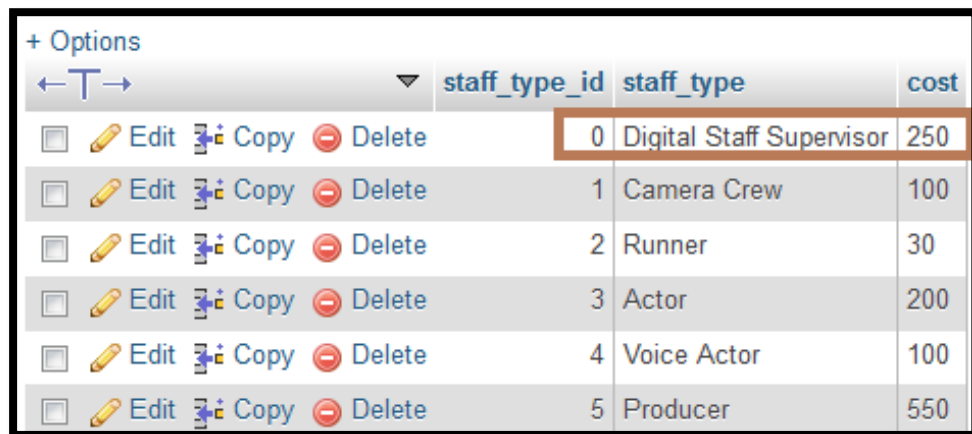


Fig. 72

- Screen short for **after Add**



+ Options

← T →

	staff_type_id	staff_type	cost
<input type="checkbox"/> Edit Copy Delete	0	Digital Staff Supervisor	250
<input type="checkbox"/> Edit Copy Delete	1	Camera Crew	100
<input type="checkbox"/> Edit Copy Delete	2	Runner	30
<input type="checkbox"/> Edit Copy Delete	3	Actor	200
<input type="checkbox"/> Edit Copy Delete	4	Voice Actor	100
<input type="checkbox"/> Edit Copy Delete	5	Producer	550

Fig. 73

(Connolly, 2005)

Task-3

Derived Data:

- This company will be extending their database.
- So that the company needs Alter the “**properties_tab**” table for including property cost and they also needs “**production_staff_tab**,” “**production_property_tab**” table.
- The company need to add **rent and wrecked cost** for “**properties_tab**”.
- Then adding cost on **properties_tab** than the company can produce **costing report** for **location, properties and staff types**.

Implementing Methods:

“properties_tab” table:

- Code for **Alter table**

```
1 ALTER TABLE properties_tab ADD rentCost decimal(19,2);  
2 ALTER TABLE properties_tab ADD wreckedCost decimal(19,2);
```

Fig. 74

- **Run** successfully

```
ALTER TABLE properties_tab ADD rentCost decimal(19,2);# 7 rows affected.  
ALTER TABLE properties_tab ADD wreckedCost decimal(19,2);# 7 rows affected.
```

Fig. 75

- Table for after Alter and update *rentCost* and *wreckdCost*

+ Options		property_id	property_type	property_item	rentCost	wreckedCost
	Edit	1	Vehicle	Car	NULL	NULL
	Edit	2	Vehicle	Tractor	NULL	NULL
	Edit	3	Vehicle	Boat	NULL	NULL
	Edit	4	Furniture	Chair	NULL	NULL
	Edit	5	Furniture	Table	NULL	NULL
	Edit	6	Building	Suburban House	NULL	NULL
	Edit	7	Building	Inner City House	NULL	NULL

Fig. 76

- Screen short for *update code*

```

1 UPDATE properties_tab SET rentCost = 100, wreckedCost =1000 WHERE property_id = 1;
2 UPDATE properties_tab SET rentCost = 150, wreckedCost =1500 WHERE property_id = 2;
3 UPDATE properties_tab SET rentCost = 100, wreckedCost =1000 WHERE property_id = 3;
4 UPDATE properties_tab SET rentCost = 10, wreckedCost =50 WHERE property_id = 4;
5 UPDATE properties_tab SET rentCost = 20, wreckedCost =70 WHERE property_id = 5;
6 UPDATE properties_tab SET rentCost = 1000, wreckedCost =10000 WHERE property_id = 6;
7 UPDATE properties_tab SET rentCost = 1000, wreckedCost =10000 WHERE property_id = 7;

```

Fig. 77

- Run* successfully

```

UPDATE properties_tab SET rentCost = 100, wreckedCost =1000 WHERE property_id = 1;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 150, wreckedCost =1500 WHERE property_id = 2;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 100, wreckedCost =1000 WHERE property_id = 3;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 10, wreckedCost =50 WHERE property_id = 4;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 20, wreckedCost =70 WHERE property_id = 5;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 1000, wreckedCost =10000 WHERE property_id = 6;# MySQL returned an empty result set (i.e. zero rows).
UPDATE properties_tab SET rentCost = 1000, wreckedCost =10000 WHERE property_id = 7;# MySQL returned an empty result set (i.e. zero rows).

```

Fig. 78

- After update **rentCost** and **WreckCost**.

+ Options		property_id	property_type	property_item	rentCost	wreckedCost
<input type="checkbox"/>	Edit Copy Delete	4	Furniture	Chair	10.00	50.00
<input type="checkbox"/>	Edit Copy Delete	5	Furniture	Table	20.00	70.00
<input type="checkbox"/>	Edit Copy Delete	1	Vehicle	Car	100.00	1000.00
<input type="checkbox"/>	Edit Copy Delete	3	Vehicle	Boat	100.00	1000.00
<input type="checkbox"/>	Edit Copy Delete	2	Vehicle	Tractor	150.00	1500.00
<input type="checkbox"/>	Edit Copy Delete	6	Building	Suburban House	1000.00	10000.00
<input type="checkbox"/>	Edit Copy Delete	7	Building	Inner City House	1000.00	10000.00

Fig. 79

- Code for **all staff cost**

```

1 SELECT `sl_no`,`production_id`,pst.`staff_type_id`,quantity * cost
2 from production_staff_tab pst,staff_tab
3 where pst.staff_type_id=staff_tab.staff_type_id

```

Fig. 80

- **Run** successfully

✓ Showing rows 0 - 11 (12 total, Query took 0.0010 sec)

```

SELECT `sl_no`,`production_id`,pst.`staff_type_id`,quantity * cost
FROM production_staff_tab pst,staff_tab
WHERE pst.staff_type_id = staff_tab.staff_type_id
LIMIT 0,30

```

Fig. 81

- **Output** values

+ Options			
sl_no	production_id	staff_type_id	quantity * cost
1	2	1	200
5	6	1	200
9	7	1	200
10	7	2	30
2	2	2	30
6	6	2	30
3	2	3	600
12	7	4	100
8	6	4	500
11	7	5	550
4	2	5	550
7	6	5	550

Fig. 82

- Staff code for **particular production**


```

1 SELECT `sl_no`,`production_id`,pst.`staff_type_id`,quantity * cost
2 from production_staff_tab pst,staff_tab
3 where pst.staff_type_id=staff_tab.staff_type_id
4 and pst.production_id=2

```

Fig. 83

- **Run** successfully

 Showing rows 0 - 3 (4 total, Query took 0.0000 sec)

```

SELECT `sl_no`,`production_id`,pst.`staff_type_id`,quantity * cost
FROM production_staff_tab pst,staff_tab
WHERE pst.staff_type_id = staff_tab.staff_type_id
AND pst.production_id =2
LIMIT 0 , 30

```

Fig. 84

- **Output** values

+ Options			
sl_no	production_id	staff_type_id	quantity * cost
1	2	1	200
2	2	2	30
3	2	3	600
4	2	5	550

Fig. 85

- Code for **total staff cost** of production


```

1 SELECT sum(quantity * cost)
2 from production_staff_tab pst, staff_tab
3 where pst.staff_type_id=staff_tab.staff_type_id
4 and pst.production_id=2

```

Fig. 86

- **Run** successfully

 Showing rows 0 - 0 (1 total, Query took 0.0000 sec)

```

SELECT SUM( quantity * cost )
FROM production_staff_tab pst, staff_tab
WHERE pst.staff_type_id = staff_tab.staff_type_id
AND pst.production_id =2

```

Fig. 87

- **Output** values

+ Options	
sum(quantity * cost)	
	1380

Fig. 88

- Code for property *rent cost*

```
1 SELECT `sl_no`,ppt.`property_id`,`location_id`,rentCost
2 from production_property_tab ppt,properties_tab pt
3 where ppt.property_id=pt.property_id
4 and `purpose`='Rent'
```

Fig. 89

- **Run** successfully

✓ Showing rows 0 - 2 (3 total, Query took 0.0000 sec)

```
SELECT `sl_no` , ppt.`property_id` , `location_id` , rentCost
FROM production_property_tab ppt, properties_tab pt
WHERE ppt.property_id = pt.property_id
AND `purpose` = 'Rent'
LIMIT 0 , 30
```

Fig. 90

- **Output** values

+ Options			
sl_no	property_id	location_id	rentCost
2	1	2	100.00
3	1	3	100.00
4	2	5	150.00

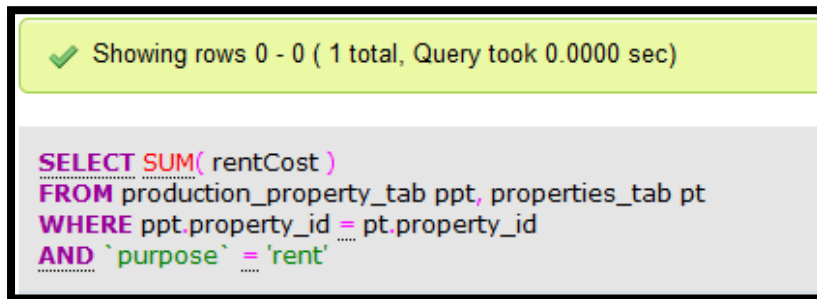
Fig. 91

- Code for total *rent cost*

```
1 SELECT sum(rentCost)
2 from production_property_tab ppt,properties_tab pt
3 where ppt.property_id=pt.property_id
4 and `purpose`='rent'
```

Fig. 92

- **Run** successfully



Showing rows 0 - 0 (1 total, Query took 0.0000 sec)

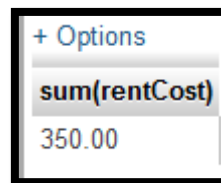
```

SELECT SUM( rentCost )
FROM production_property_tab ppt, properties_tab pt
WHERE ppt.property_id = pt.property_id
AND `purpose` = 'rent'

```

Fig. 93

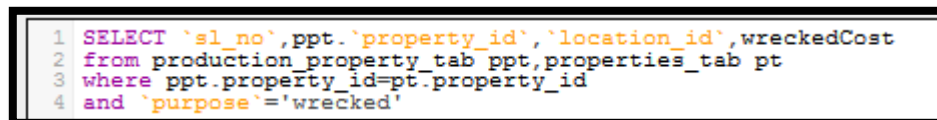
- **Output** values



sum(rentCost)
350.00

Fig. 94

- Code for properties **wrecked cost**



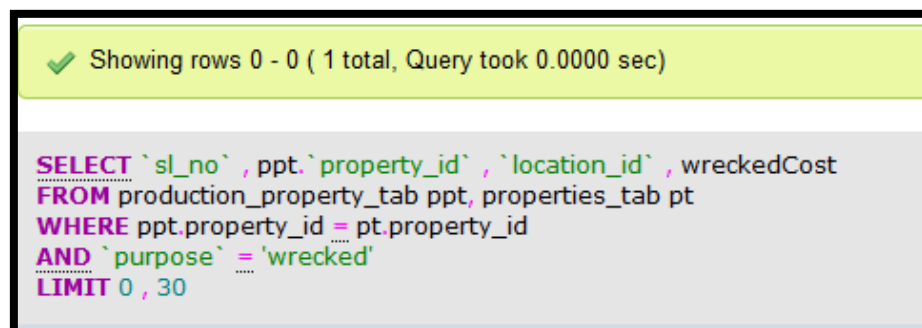
```

1 SELECT `sl_no`, ppt.`property_id`, `location_id`, wreckedCost
2 from production_property_tab ppt, properties_tab pt
3 where ppt.property_id=pt.property_id
4 and `purpose`='wrecked'

```

Fig. 95

- **Run** successfully



Showing rows 0 - 0 (1 total, Query took 0.0000 sec)

```

SELECT `sl_no`, ppt.`property_id`, `location_id`, wreckedCost
FROM production_property_tab ppt, properties_tab pt
WHERE ppt.property_id = pt.property_id
AND `purpose` = 'wrecked'
LIMIT 0 , 30

```

Fig. 96

- **Output** values

+ Options			
sl_no	property_id	location_id	wreckedCost
1	1	1	1000.00

Fig. 97

- Code for total **wrecked cost**

```

1 SELECT SUM(wreckedCost) As '[Total Wrecked Cost]'
2 from production_property_tab ppt,properties_tab pt
3 where ppt.property_id=pt.property_id
4 and `purpose`='wrecked'
5

```

Fig. 98

- **Run** successfully

✓ Showing rows 0 - 0 (1 total, Query took 0.0000 sec)

```

SELECT SUM( wreckedCost ) AS '[Total Wrecked Cost]'
FROM production_property_tab ppt, properties_tab pt
WHERE ppt.property_id = pt.property_id
AND `purpose` = 'wrecked'

```

Fig. 99

- **Output** values

+ Options	
[Total Wrecked Cost]	
1000.00	

Fig. 100

(Kroenke, (2007))

Task-4

Evaluation:

Assignment requirement:

- For this assignment I have **used SQL server** (My SQL version v3.2.1).
- I have access server used by **local host**
- After I have created database name. my database name is **“dddatabase”**
- Then I have **created 8 data table** for **store and keeping data**
- Then created data **relationship model** with **primary and foreign key**.
- The all table are **normalization** from.
- After finish **data dictionary** table with values
- Then **input query** code. My query successfully runs.

Evaluation table including:

Task	Requirement	Performed Task	Remark
Task-1	Entity relationship model	Created entity relationship model	done
	Normalization process	Fully 3^d normalization from show	
	Data Table	Completed data dictionary table	
Task-2	Input Data	Input all data related of “production_tab”, “client_tab” and “staff_tab” table	
		Input data for “location_tab” and “product_tab” table	
		Input data for “properties_tab” and “production_staff_tab” table	
		Input data for “production_property_tab” table	
	Write a Query	Completed query are all the production which staff_type work them	
		Completed query for all the “properties_tab” which they used production	
		Completed query are all the “loction_tab” and	

		production which taken location	done
	Write a Query	Completed query for all the <i>“production_property_tab”</i> and <i>“location_tab”</i> which taken particular production	
		Completed query are that count number from <i>“location_tab”</i> for production	
	Update Query	Update <i>“staff_tab”</i> where update runner cost update 30 which <i>staff_type_id=2</i>	
		Update <i>“client_tab”</i> where update <i>‘Epom Vehicle Management’</i> which <i>client_id=1</i>	
		Update <i>“production_staff_tab”</i> where update <i>“quantity=5”</i> which <i>production_id=6</i> and <i>staff_type_id=1</i>	
	Add Query	Add <i>“staff_tab”</i> where update <i>staff_type “Digital Effect supervisor”</i> , and <i>cost 250</i>	
Task-3	Drive Data	Adding new cost information on table <i>“properties_tab”</i> . Then all the <i>cost information</i> finds out including <i>staff costing, property use costing</i> . Make a <i>total sum</i> of those costing on a <i>particular production</i> .	

Conclusion:

I have fulfilled ***the entire requirement in this assignment.*** I have described all the ***process*** with ***screenshot*** and I have flowed ***database design.*** ***And*** successfully run data query. I have ***gain a lot of knowledge*** in this assignment.

Bibliography

- Addison-Wesley, 2005. *Database Systems: A Practical Approach to Design and Implementation*. Fourth Edition ed. Addison-Wesley.
- Connolly, T.a.B.C., n.d. *Database Systems A Practical Approach to Design, Implementation and Management*. Fourth Edition ed. Addison and Wesley.
- Kroenke, D.M., (2007). *Database Concepts*. 3rd ed. Prentice Hall.
- Palgrave, n.d. *Database Systems*. Third Edition ed. Benyon-Davies.