



ROYALTY EVENT DECORATION COMPANY

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COURSEWORK1

1: BUSINESS SYSTEM SUMMARY:

Name of the company is called Royalty Events Decoration Company and it is a coupled-owned company, the

company has 16 years of experience, and it is located in Lewisham Southeast London. We deal with the design

of the of the hall for weddings and birthday parties with flowers and balloons. We've also completed 125

projects, ever since Royalty Events Decoration Company started business. And we use (DBMS) Data Base

Management System to help build and save the company to reach its maximum peak

2: OVERVIEW AND OBJECTIVES OF THE BUSINESS

- . It is to provide a secured data of the company and the customers
- . Make access to the data easy for the company
- . Protect the company data from unauthorised system
- . Offers an efficient way of handling a large amount of data

3: JUSTIFICATION OF THE DEVELOPED DB MEETS THE OBJECTIVES

. DBMS helps increase the company accessibility to the company's data, in a way that it allows the user to be

able to access and share the company's data in a quick and effectively way

. DBMS can offer an efficient way of handling data by arranging the data by name, id, address, etc and remove

and eliminates duplicate and unwanted files

. DBMS provides security to the company and keep the company's and the customer data safe from unwanted

devices

. It helps in responding to customers easy and reliable

4: ERD OF THE COMPANY

Royalty Events Decoration Company has 7 entities which involves the Management, Customers, Employees,

Decorations Tools, Branches, Project Design and Bill

. The Management has the attribute of SSN, Employee number, Time Duration, Project.

Number

. The Management team manages the employees with the attribute of SSN, Name, Specialisation and Rank.

And also, the Management creates Projects

. The Employees serves the Customers, and the Customers provides the attribute of name, Address, Date of

Event and Account information

. The customers grant out the Projects Design in which the Project Design as the attributes of Name, ID, Start

date, End date, Feedback

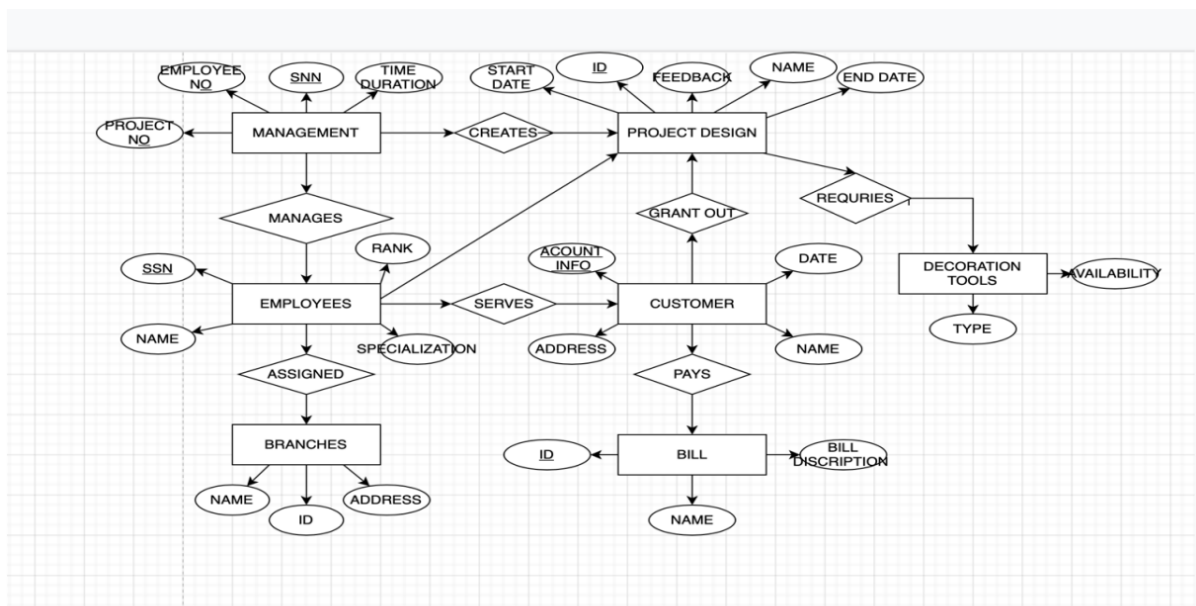
. The Employee also helps develops the project design

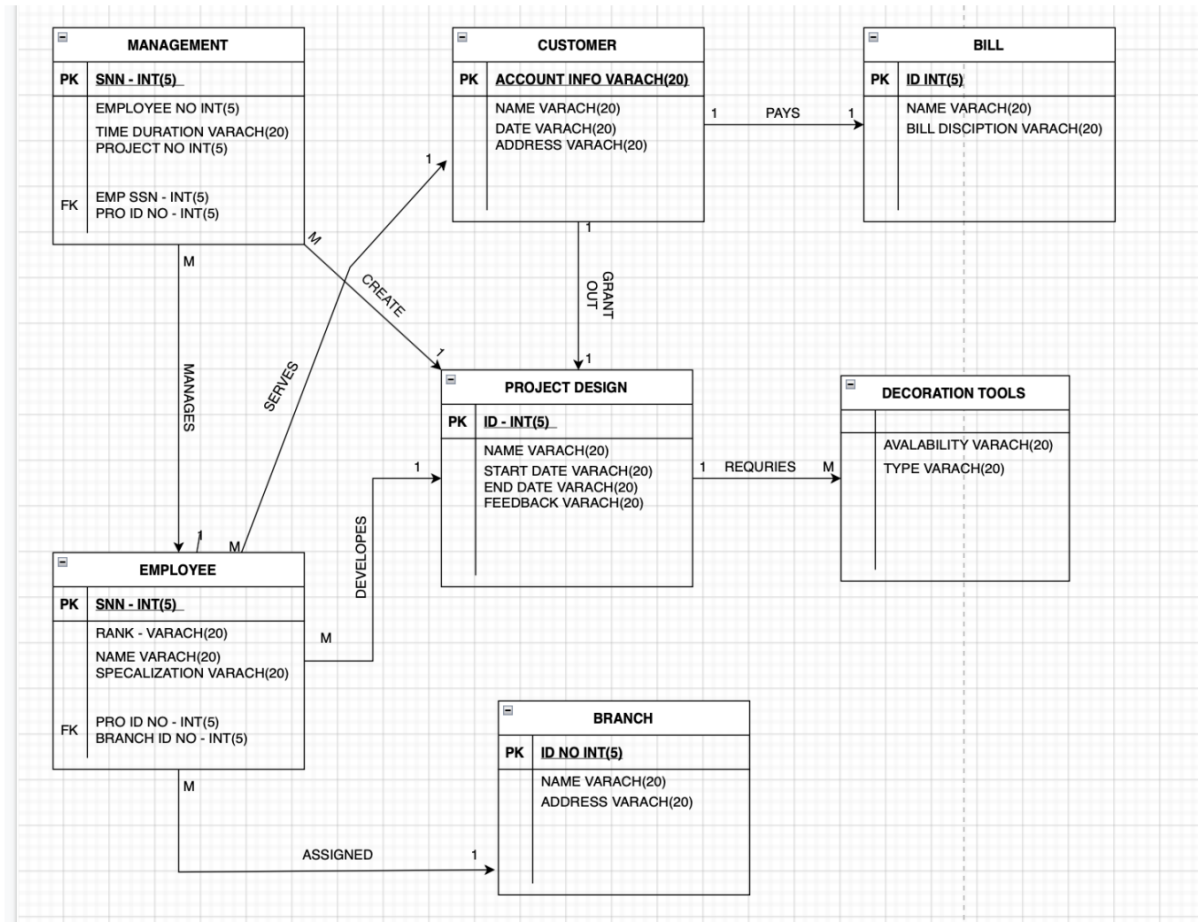
. The Project Design requires the Decoration Tools with the attributes of Availability and Type

. The Employees assigned to the branches with the attributes of name, ID and Address

. The Customer also pays Bills with the attributes of Bill ID, Bill Description and Name

5: PHYSICAL DATA MODEL





ROYALTY DECORATION COMPANY TABLE STRUCTURE

Server: 127.0.0.1 » Database: royalty decoration

StructureSQLSearchQueryExportImportOperationsPrivilegesRoutinesEvents

Filters

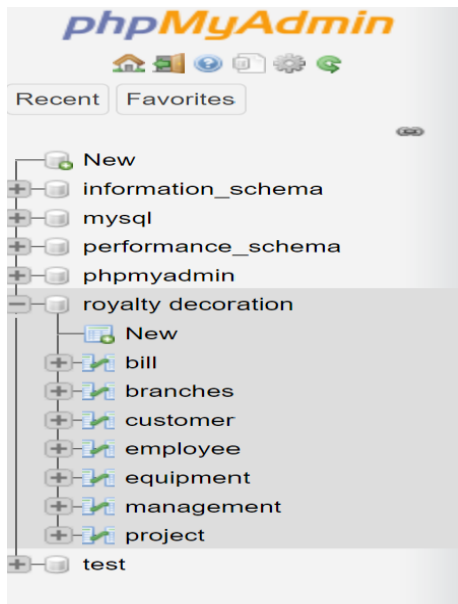
Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> bill		8	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> branches		8	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> customer		19	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> employee		8	InnoDB	utf8mb4_general_ci	48.0 KiB	-
<input type="checkbox"/> equipment		8	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> management		8	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> project		8	InnoDB	utf8mb4_general_ci	32.0 KiB	-
7 tables	Sum	67	InnoDB	utf8mb4_general_ci	192.0 KiB	0 B

☐ Check all

With selected:

TABLE SCHEMA



MANAGEMENT TABLE & STRUCTURE

Navigation: Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking

Table structure | Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 mangr_ssn	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 mangr_name	varchar(10) utf8mb4_general_ci			Yes	NULL			Change Drop More
<input type="checkbox"/>	3 mangr_job	varchar(9) utf8mb4_general_ci			Yes	NULL			Change Drop More
<input type="checkbox"/>	4 salary	double(7,2)			Yes	NULL			Change Drop More
<input type="checkbox"/>	5 work_hours	int(11)			Yes	NULL			Change Drop More

☐ Check all With selected: [Browse](#) [Change](#) [Drop](#) [Primary](#) [Unique](#) [Index](#) [Spatial](#) [Fulltext](#)
[Add to central columns](#) [Remove from central columns](#)

Print | Propose table structure | Track table | Move columns | Normalize

Add 1 column(s) after work_hours [Go](#)

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	mangr_ssn	8	A	No	

Navigation: Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking

Showing rows 0 - 7 (8 total, Query took 0.0008 seconds.)

`SELECT * FROM `management``

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

			mangr_ssn	mangr_name	mangr_job	salary	work_hours
<input type="checkbox"/>	Edit Copy Delete	111	ADEWALE	OVERALL M	5000.00	8	
<input type="checkbox"/>	Edit Copy Delete	112	TUNDE	ASS. MANAG	4000.00	7	
<input type="checkbox"/>	Edit Copy Delete	113	COLA	SALES MAN	3500.00	8	
<input type="checkbox"/>	Edit Copy Delete	114	WOLE	CLERK MAN	3700.00	8	
<input type="checkbox"/>	Edit Copy Delete	115	GREEN	ANALYST	3400.00	7	
<input type="checkbox"/>	Edit Copy Delete	116	SOPHIE	CLERK MAN	3000.00	7	
<input type="checkbox"/>	Edit Copy Delete	117	ARC	SALES MAN	2900.00	8	
<input type="checkbox"/>	Edit Copy Delete	118	WALES	TRANSPORT	6000.00	8	

☐ Check all With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

EMPLOYEE TABLE & STRUCTURE

BrowserStructureSQLSearchInsertExportImportPrivilegesOperationsTracking

Table structureRelation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 emp_ssn	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 emp_name	varchar(10)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3 emp_job	varchar(12)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 emp_salary	double(7,2)			Yes	NULL			Change Drop More
<input type="checkbox"/>	5 proj_id	int(11)			Yes	NULL			Change Drop More
<input type="checkbox"/>	6 mangr_ssn	int(11)			Yes	NULL			Change Drop More

☐ Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Normalize

Add column(s)

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	emp_ssn	8	A	No	
Edit Rename Drop	management	BTREE	No	No	mangr_ssn	8	A	Yes	
Edit Rename Drop	project	BTREE	No	No	proj_id	8	A	Yes	

BrowserStructureSQLSearchInsertExportImportPrivilegesOperationsTracking

Showing rows 0 - 7 (8 total, Query took 0.0060 seconds.)

SELECT * FROM `employee`

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: Filter rows: Sort by key:

+ Options

				emp_ssn	emp_name	emp_job	emp_salary	proj_id	mangr_ssn
<input type="checkbox"/>	Edit Copy Delete	1131	LOT	DRIVER	1800.00	1121	111		
<input type="checkbox"/>	Edit Copy Delete	1132	GUY	BACKGROUND S	2000.00	1122	112		
<input type="checkbox"/>	Edit Copy Delete	1133	RICK	TABLE AND CH	1123.00	1123	113		
<input type="checkbox"/>	Edit Copy Delete	1134	TOM	STAGE SET	1900.00	1124	114		
<input type="checkbox"/>	Edit Copy Delete	1135	KOFI	FLOWERS SET	2500.00	1125	115		
<input type="checkbox"/>	Edit Copy Delete	1136	SOON	TABLES AND C	2100.00	1126	116		
<input type="checkbox"/>	Edit Copy Delete	1137	SMITH	BACKGROUND S	1700.00	1127	117		
<input type="checkbox"/>	Edit Copy Delete	1138	ACK	STAGE SET	2100.00	1128	118		

☐ Check all With selected: Edit Copy Delete Export

CUSTOMER TABLE & STRUCTURE

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking

Table structure

Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	cust_name	varchar(12)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	2	cust_address	varchar(14)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	3	account_info	varchar(12)	utf8mb4_general_ci	No	None			Change Drop More
<input type="checkbox"/>	4	register_no	int(11)		No	None			Change Drop More
<input type="checkbox"/>	5	proj_id	int(11)		Yes	NULL			Change Drop More

☐ Check all
 With selected:
 Browse
 Change
 Drop
 Primary
 Unique
 Index
 Spatial
 Fulltext
 Add to central columns
 Remove from central columns

Print
Propose table structure
Track table
Move columns
Normalize

Add
1
column(s)
after proj_id
Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	register_no	19	A	No	

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations

Showing rows 0 - 18 (19 total, Query took 0.0050 seconds.)

SELECT * FROM `customer`

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

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

Options

cust_name
cust_address
account_info
register_no
proj_id

<input type="checkbox"/>	Edit Copy Delete	JUNIOR	SW13 4ZQ	TESCO BANK	1111	1121
<input type="checkbox"/>	Edit Copy Delete	KIKI	SE1 5NQ	METRO BANK	1112	1122
<input type="checkbox"/>	Edit Copy Delete	KASIM	SW8 5AV	MONZO BANK	1113	1123
<input type="checkbox"/>	Edit Copy Delete	TAIWO	SW3 5CG	BARCLAYS BAN	1114	1124
<input type="checkbox"/>	Edit Copy Delete	KENNEDY	SE4 7FG	LOYD BANK	1115	1125
<input type="checkbox"/>	Edit Copy Delete	HOWEVER	SW3 3RT	SANTADAR BAN	1116	1126
<input type="checkbox"/>	Edit Copy Delete	FUAD	SW7 4VY	UBA BANK	1117	1127
<input type="checkbox"/>	Edit Copy Delete	KATE	SE5 6GH	MOON BANK	1118	1128
<input type="checkbox"/>	Edit Copy Delete	KASIM	SW8 5AV	MONZO BANK	1411	1077
<input type="checkbox"/>	Edit Copy Delete	KIKI	SE1 5NQ	METRO BANK	1413	1053
<input type="checkbox"/>	Edit Copy Delete	KIKI	SE1 5NQ	METRO BANK	1419	1053
<input type="checkbox"/>	Edit Copy Delete	TAIWO	SW3 5CG	BARCLAYS BAN	2311	1078
<input type="checkbox"/>	Edit Copy Delete	KENNEDY	SE4 7FG	LOYD BANK	3453	1056
<input type="checkbox"/>	Edit Copy Delete	JUNIOR	SW13 4ZQ	TESCO BANK	4444	1061
<input checked="" type="checkbox"/>	Console Edit Copy Delete	JUNIOR	SW13 4ZQ	TESCO BANK	4534	1061

DECORATIONS/EQUIPMENT TOOLS TABLE & STRUCTURE

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking

Showing rows 0 - 7 (8 total, Query took 0.0060 seconds.)

SELECT * FROM `equipment`

Profiling
Edit inline
Edit
Explain SQL
Create PHP code
Refresh

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

+ Options

		equipment_id	type	availability
<input type="checkbox"/>	Edit	Copy	Delete	11 BACKGROUND ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	12 STAGE ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	13 FLOWERS ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	14 CHAIRS AND ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	15 BALLOONS ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	16 TABLE COVE ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	17 CHAIR COVE ANYTIME
<input type="checkbox"/>	Edit	Copy	Delete	18 STAGE LIGH ANYTIME

☐ Check all
With selected:
Edit
Copy
Delete
Export

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking

Table structure
Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	equipment_id	int(11)			No	None			Change Drop More
<input type="checkbox"/> 2	type	varchar(10)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/> 3	availability	varchar(9)	utf8mb4_general_ci		No	None			Change Drop More

☐ Check all
With selected:
Browse
Change
Drop
Primary
Unique
Index
Spatial
Fulltext

Add to central columns
Remove from central columns

Print
Propose table structure
Track table
Move columns
Normalize

Add
1
column(s)
after availability
Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	equipment_id	8	A	No	

BILLS TABLE & STRUCTURE

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking

Table structure

Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	bill_address	varchar(14)	utf8mb4_general_ci	Yes	NULL			
<input type="checkbox"/>	2	bill_name	varchar(14)	utf8mb4_general_ci	No	None			
<input type="checkbox"/>	3	bill_info	varchar(13)	utf8mb4_general_ci	Yes	NULL			
<input type="checkbox"/>	4	register_no	int(11)		Yes	NULL			

☐ Check all
 With selected:
 Browse
 Change
 Drop
 Primary
 Unique
 Index
 Spatial
 Fulltext
 Add to central columns
 Remove from central columns

Print
Propose table structure
Track table
Move columns
Normalize

Add
column(s)
after register_no
Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
	PRIMARY	BTREE	Yes	No	bill_name	8	A	No	
	customer	BTREE	No	No	register_no	8	A	Yes	

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations

Showing rows 0 - 7 (8 total, Query took 0.0015 seconds.)

SELECT * FROM `bill`

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

☐ Show all
 Number of rows:
Filter rows:
Sort by key:

+ Options

bill_address
bill_name
bill_info
register_no

<input type="checkbox"/>				SW7 4VY	fuad bill	to be paid	1117
<input type="checkbox"/>				SW13 4ZQ	junior bill	to be paid	1111
<input type="checkbox"/>				SW8 5AV	kasim bill	to be paid	1113
<input type="checkbox"/>				SE5 6GH	kate bill	to be paid	1118
<input type="checkbox"/>				SE4 7FG	kennedy bill	to be paid	1115
<input type="checkbox"/>				SE1 5NQ	kiki bill	to be paid	1112
<input type="checkbox"/>				SW3 5CG	taiwo bill	to be paid	1114
<input type="checkbox"/>				SW3 3RT	though bill	to be paid	1116

☐ Check all
 With selected:
 Edit
 Copy
 Delete
 Export

☐ Show all
 Number of rows:
Filter rows:
Sort by key:

BRANCHES TABLE & STRUCTURE

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
M

Table structure

Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 branch_id	int(11)			No	None			Change Drop More
<input type="checkbox"/>	2 branch_name	varchar(12)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3 branch_address	varchar(100)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 emp_ssn	int(11)			Yes	NULL			Change Drop More

☐ Check all
 With selected:
 Browse
 Change
 Drop
 Primary
 Unique
 Index
 Spatial
 Fulltext
 Add to central columns
 Remove from central columns

Print
Propose table structure
Track table
Move columns
Normalize

Add
1
column(s)
after emp_ssn
Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	branch_id	8	A	No	
Edit Rename Drop	employee	BTREE	No	No	emp_ssn	8	A	Yes	

Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operation

Showing rows 0 - 7 (8 total. Query took 0.0008 seconds.)

SELECT * FROM `branches`

☐ Profiling
[\[Edit inline \]](#)
[\[Edit \]](#)
[\[Explain SQL \]](#)
[\[Create PHP code \]](#)
[\[Refresh \]](#)

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

+ Options

	branch_id	branch_name	branch_address	emp_ssn
<input type="checkbox"/> Edit Copy Delete	1141	PUTNEY	SW15 6NQ	1131
<input type="checkbox"/> Edit Copy Delete	1142	EVELYN	SW15 4NQ	1132
<input type="checkbox"/> Edit Copy Delete	1143	PECKHAM	SE15 S45	1133
<input type="checkbox"/> Edit Copy Delete	1144	CLAPHAM	SW7 YRT	1134
<input type="checkbox"/> Edit Copy Delete	1145	LEWISHAM	SE20 7UV	1135
<input type="checkbox"/> Edit Copy Delete	1146	VICTORIA	SW1 2FG	1136
<input type="checkbox"/> Edit Copy Delete	1147	DEPFORD	E15 8YU	1137
<input type="checkbox"/> Edit Copy Delete	1148	STRATFORD	E16 9HG	1138

☐ Check all
 With selected:
 Edit
 Copy
 Delete
 Export

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

PROJECTS TABLE & STRUCTURE

Database management interface showing table structure and data.

Table Structure:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	proj_id	int(11)			No	None			Change Drop More
2	proj_name	varchar(100)	utf8mb4_general_ci		Yes	NULL			Change Drop More
3	proj_title	varchar(15)	utf8mb4_general_ci		Yes	NULL			Change Drop More
4	start_date	varchar(12)	utf8mb4_general_ci		Yes	NULL			Change Drop More
5	end_date	varchar(12)	utf8mb4_general_ci		Yes	NULL			Change Drop More
6	feedback	varchar(30)	utf8mb4_general_ci		Yes	NULL			Change Drop More
7	register_no	int(11)			Yes	NULL			Change Drop More
8	equipment_id	int(11)			Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	proj_id	8	A	No	
Edit Rename Drop	equipment	BTREE	No	No	equipment_id	8	A	Yes	

Data View:

Showing rows 0 - 7 (8 total, Query took 0.0063 seconds.)

```
SELECT * FROM `project`;
```

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

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

Options:

	proj_id	proj_name	proj_title	start_date	end_date	feedback	register_no	equipment_id
1121	PROJECT A	BUSINESS	2020-01-01	2007-08-13	GOOD WORK DONE	1111	17	
1122	PROJECT B	WEDDING	2020-08-22	2020-03-20	GOOD WORK DONE	1112	13	
1123	PROJECT C	BIRTHDAY	2020-02-24	2008-07-31	GOOD WORK DONE	1113	15	
1124	PROJECT D	FAMILY	2021-01-01	NULL	GOOD WORK DONE	1114	14	
1125	PROJECT E	SOUND	2021-01-01	2007-08-13	GOOD WORK DONE	1115	18	
1126	PROJECT F	BROTHER	2021-01-01	2007-08-13	GOOD WORK DONE	1116	16	
1127	PROJECT G	UNCLE	2022-01-01	2007-08-13	GOOD WORK DONE	1117	11	
1128	PROJECT H	FRIEND	2022-01-01	2007-08-13	GOOD WORK DONE	1118	12	

COURSEWORK2

QUESTIONS

1. Write the SQL query to find the salaries of all employee. Return salary.

QUERIE

SELECT emp_salary

FROM employee;

✓ Showing rows 0 - 7 (8 total, Query took 0.0013 seconds.)

```
SELECT emp_salary FROM employee;
```

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

☐ Show all | Number of rows: 25 ▾ Filter rows: Sort by key

Options

	emp_salary
<input type="checkbox"/> Edit Copy Delete	1800.00
<input type="checkbox"/> Edit Copy Delete	2000.00
<input type="checkbox"/> Edit Copy Delete	1123.00
<input type="checkbox"/> Edit Copy Delete	1900.00
<input type="checkbox"/> Edit Copy Delete	2500.00
<input type="checkbox"/> Edit Copy Delete	2100.00
<input type="checkbox"/> Edit Copy Delete	1700.00
<input type="checkbox"/> Edit Copy Delete	2100.00

⬆ ☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 ▾ Filter rows: Sort by key

Query results operations

Print Copy to clipboard Export Display chart Create view

2. Write the SQL query to find the designations of the Management. Return job name.

QUERIE

```
SELECT DISTINCT mangr_job
FROM management;
```

✓ Showing rows 0 - 5 (6 total, Query took 0.0043 seconds.)

```
SELECT DISTINCT mangr_job FROM management;
```

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

☐ Show all | Number of rows: 25 ▾ Filter rows:

Options

	mangr_job
<input type="checkbox"/> Edit Copy Delete	OVERALL M
<input type="checkbox"/> Edit Copy Delete	ASS.MANAG
<input type="checkbox"/> Edit Copy Delete	SALES MAN
<input type="checkbox"/> Edit Copy Delete	CLERK MAN
<input type="checkbox"/> Edit Copy Delete	ANALYST
<input type="checkbox"/> Edit Copy Delete	TRANSPORT

↑ ☐ Check all With selected: Edit Copy Delete

☐ Show all | Number of rows: 25 ▾ Filter rows:

Query results operations

3. Write the SQL query to list the employee's name and job name as a format of "Employee & Salary".

QUERIE

```
SELECT emp_name, emp_salary,
CONCAT(emp_name, emp_salary)
FROM employee;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0017 seconds.)

```
SELECT emp_name, emp_salary, CONCAT(emp_name, emp_salary) FROM employee;
```

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

☐ Show all | Number of rows: Filter rows: Sort by key:

+ Options

	emp_name	emp_salary	CONCAT(emp_name, emp_salary)
<input type="checkbox"/> Edit Copy Delete	LOT	1800.00	LOT1800.00
<input type="checkbox"/> Edit Copy Delete	GUY	2000.00	GUY2000.00
<input type="checkbox"/> Edit Copy Delete	RICK	1123.00	RICK1123.00
<input type="checkbox"/> Edit Copy Delete	TOM	1900.00	TOM1900.00
<input type="checkbox"/> Edit Copy Delete	KOFI	2500.00	KOFI2500.00
<input type="checkbox"/> Edit Copy Delete	BALD	2100.00	BALD2100.00
<input type="checkbox"/> Edit Copy Delete	SMITH	1700.00	SMITH1700.00
<input type="checkbox"/> Edit Copy Delete	ACK	2100.00	ACK2100.00

☐ Check all
 With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

4. Write the SQL query to count the number of characters. Return employee name length.

QUERIE

```
SELECT length(trim(emp_name))
```

```
FROM employee;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0022 seconds.)

```
SELECT length(trim(emp_name)) FROM employee;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all

Number of rows: 25 ▾

Filter rows:

+ Options

length(trim(emp_name))

3

3

4

3

4

4

5

3

☐ Show all

Number of rows: 25 ▾

Filter rows:

5. Write the SQL query to find the employee SSN, salary, and name of all the employee.

QUERIE

```
SELECT emp_ssn,  
       emp_salary,  
       emp_name  
FROM employee;
```


✓ Showing rows 0 - 7 (8 total, Query took 0.0014 seconds.)

```
SELECT emp_ssn, emp_salary, emp_name FROM employee;
```

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

☐ Show all | Number of rows: Filter rows:

Options

				emp_ssn	emp_salary	emp_name
<input type="checkbox"/>		Edit		Copy		Delete
				1131	1800.00	LOT
<input type="checkbox"/>		Edit		Copy		Delete
				1132	2000.00	GUY
<input type="checkbox"/>		Edit		Copy		Delete
				1133	1123.00	RICK
<input type="checkbox"/>		Edit		Copy		Delete
				1134	1900.00	TOM
<input type="checkbox"/>		Edit		Copy		Delete
				1135	2500.00	KOFI
<input type="checkbox"/>		Edit		Copy		Delete
				1136	2100.00	BALD
<input type="checkbox"/>		Edit		Copy		Delete
				1137	1700.00	SMITH
<input type="checkbox"/>		Edit		Copy		Delete
				1138	2100.00	ACK

☐ Check all With selected: Edit Copy Delete Export

6. Write the SQL query to find the department with jobs. Return salary, Job name.

QUERIE

```
SELECT DISTINCT emp_job,
```

```
emp_salary
```

```
FROM employee ;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0020 seconds.)

```
SELECT DISTINCT emp_job, emp_salary FROM employee;
```

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

☐ Show all | Number of rows: 25 | Filter rows:

Options

				emp_job	emp_salary
<input type="checkbox"/>				DRIVER	1800.00
<input type="checkbox"/>				BACKGROUND S	2000.00
<input type="checkbox"/>				TABLE AND CH	1123.00
<input type="checkbox"/>				STAGE SET	1900.00
<input type="checkbox"/>				FLOWERS SET	2500.00
<input type="checkbox"/>				TABLES AND C	2100.00
<input type="checkbox"/>				BACKGROUND S	1700.00
<input type="checkbox"/>				STAGE SET	2100.00

☐ Check all With selected: Edit Copy Delete

7. From the following table, write a SQL query to find those project who do not belong to 2020. Return complete information about the projects

QUERIE

SELECT *

FROM project

WHERE proj_id NOT IN (2020);

✓ Showing rows 0 - 7 (8 total, Query took 0.0016 seconds.)

```
SELECT * FROM project WHERE proj_id NOT IN (2020);
```

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

☐ Show all | Number of rows: 25 | Filter rows: Sort by key: None

Options

					proj_id	proj_name	proj_title	start_date	end_date	feedback	register_no	equipment_id
<input type="checkbox"/>					1121	PROJECT A	BUSINESS	2020-01-01	2020-01-13	GOOD WORK DONE	1111	17
<input type="checkbox"/>					1122	PROJECT B	WEDDING	2020-08-22	2020-08-30	GOOD WORK DONE	1112	13
<input type="checkbox"/>					1123	PROJECT C	BIRTHDAY	2020-02-24	2020-02-31	GOOD WORK DONE	1113	15
<input type="checkbox"/>					1124	PROJECT D	FAMILY	2021-01-01	NULL	GOOD WORK DONE	1114	14
<input type="checkbox"/>					1125	PROJECT E	SON	2021-01-01	2021-01-13	GOOD WORK DONE	1115	18
<input type="checkbox"/>					1126	PROJECT F	BROTHER	2021-01-01	2021-01-13	GOOD WORK DONE	1116	16
<input type="checkbox"/>					1127	PROJECT G	UNCLE	2022-01-01	2022-01-13	GOOD WORK DONE	1117	11
<input type="checkbox"/>					1128	PROJECT H	FRIEND	2022-01-01	2022-01-13	GOOD WORK DONE	1118	12

☐ Check all With selected: Edit Copy Delete Export

8. Write the SQL query to find those project before 2022.

QUERIE

SELECT *

FROM project

WHERE start_date<('2022-01-01');

Showing rows 0 - 5 (6 total, Query took 0.0014 seconds.)

```
SELECT * FROM project WHERE start_date<('2022-01-01');
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	proj_id	proj_name	proj_title	start_date	end_date	feedback	register_no	equipment_id
<input type="checkbox"/> Edit Copy Delete	1121	PROJECT A	BUSINESS	2020-01-01	2020-01-13	GOOD WORK DONE	1111	17
<input type="checkbox"/> Edit Copy Delete	1122	PROJECT B	WEDDING	2020-08-22	2020-08-30	GOOD WORK DONE	1112	13
<input type="checkbox"/> Edit Copy Delete	1123	PROJECT C	BIRTHDAY	2020-02-24	2020-02-31	GOOD WORK DONE	1113	15
<input type="checkbox"/> Edit Copy Delete	1124	PROJECT D	FAMILY	2021-01-01	NULL	GOOD WORK DONE	1114	14
<input type="checkbox"/> Edit Copy Delete	1125	PROJECT E	SON	2021-01-01	2021-01-13	GOOD WORK DONE	1115	18
<input type="checkbox"/> Edit Copy Delete	1126	PROJECT F	BROTHER	2021-01-01	2021-01-13	GOOD WORK DONE	1116	16

☐ Check all | With selected: Edit Copy Delete Export

9. Write the SQL query to compute the average salary of those management who work as 'CLARK MANAGER'.

QUERIE

SELECT avg(salary)

FROM management

WHERE mangr_job = 'CLARK MANAGER';

Showing rows 0 - 0 (1 total, Query took 0.0018 seconds.)

```
SELECT avg(salary) FROM management WHERE mangr_job = 'CLARK MANAGER';
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

avg(salary)
NULL

☐ Show all | Number of rows: 25 | Filter rows: Search this table

10. Write a SQL query to find the details of the employee 'BLAD'.

QUERIE

SELECT *

FROM employees

WHERE emp_name = 'BLAD';

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0035 seconds.)

```
SELECT * FROM employee WHERE emp_name = 'BLAD';
```

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

emp_ssn	emp_name	emp_job	emp_salary	proj_id	mangr_ssn
---------	----------	---------	------------	---------	-----------

Query results operations

[Create view](#)

[Bookmark this SQL query](#)

11. Write the SQL query to find those employees whose salary exceeds 2500 after giving 25% increment

QUERIE

SELECT *

FROM employee

WHERE (1.25*emp_salary) > 2500;

✓ Showing rows 0 - 2 (3 total, Query took 0.0013 seconds.)

```
SELECT * FROM employee WHERE (1.25*emp_salary) > 2500;
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

			emp_ssn	emp_name	emp_job	emp_salary	proj_id	mangr_ssn
<input type="checkbox"/>	Edit	Copy	Delete	1135	KOFI	FLOWERS SET	2500.00	1125 115
<input type="checkbox"/>	Edit	Copy	Delete	1136	BALD	TABLES AND C	2100.00	1126 116
<input type="checkbox"/>	Edit	Copy	Delete	1138	ACK	STAGE SET	2100.00	1128 118

↑ ☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

12. Write the SQL query to find the names of the employee whose length is three.

QUERIE

SELECT emp_name

FROM employee

WHERE length(emp_name)=3;

✓ Showing rows 0 - 3 (4 total, Query took 0.0015 seconds.)

```
SELECT emp_name FROM employee WHERE length(emp_name)=3;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 ▾ Filter rows: Sort by key: No

Options

	emp_name
<input type="checkbox"/> Edit Copy Delete	LOT
<input type="checkbox"/> Edit Copy Delete	GUY
<input type="checkbox"/> Edit Copy Delete	TOM
<input type="checkbox"/> Edit Copy Delete	ACK

↑ ☐ Check all With selected: Edit Copy Delete Export

13. Write the SQL query to find those management whose salaries are less than 3500.

QUERIE

SELECT *

FROM management

WHERE salary <3500;

✓ Showing rows 0 - 2 (3 total, Query took 0.0015 seconds.)

```
SELECT * FROM management WHERE salary <3500;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 ▾ Filter rows: Sort by key: None

Options

	mangr_ssn	mangr_name	mangr_job	salary	work_hours
<input type="checkbox"/> Edit Copy Delete	115	GREEN	ANALYST	3400.00	7
<input type="checkbox"/> Edit Copy Delete	116	SOPHIE	CLERK MAN	3000.00	7
<input type="checkbox"/> Edit Copy Delete	117	ARC	SALES MAN	2900.00	8

↑ ☐ Check all With selected: Edit Copy Delete Export

14. Write a SQL query to check whether the employees SSN are unique or not.

QUERIE

SELECT emp_ssn,

count(*)

FROM employee

GROUP BY emp_ssn;

✓ Showing rows 0 - 7 (8 total, Query took 0.0019 seconds.)

```
SELECT emp_ssn, count(*) FROM employee GROUP BY emp_ssn;
```

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

☐ Show all | Number of rows: Filter rows:

+ Options

					emp_ssn	count(*)
<input type="checkbox"/>					1131	1
<input type="checkbox"/>					1132	1
<input type="checkbox"/>					1133	1
<input type="checkbox"/>					1134	1
<input type="checkbox"/>					1135	1
<input type="checkbox"/>					1136	1
<input type="checkbox"/>					1137	1
<input type="checkbox"/>					1138	1

☐ Check all
 With selected: Edit Copy Delete

15. List all staff whose salary is higher than all staff's average salary.

QUERIE

Select *

From employee

Where emp_salary > (select avg(emp_salary) from employee);

✓ Showing rows 0 - 3 (4 total, Query took 0.0019 seconds.)

```
Select * From employee Where emp_salary > (select avg(emp_salary) from employee);
```

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

☐ Show all | Number of rows: Filter rows: Sort by key:

+ Options

					emp_ssn	emp_name	emp_job	emp_salary	proj_id	mangr_ssn
<input type="checkbox"/>					1132	GUY	BACKGROUND S	2000.00	1122	112
<input type="checkbox"/>					1135	KOFI	FLOWERS SET	2500.00	1125	115
<input type="checkbox"/>					1136	BALD	TABLES AND C	2100.00	1126	116
<input type="checkbox"/>					1138	ACK	STAGE SET	2100.00	1128	118

☐ Check all
 With selected: Edit Copy Delete Export

☐ Show all | Number of rows: Filter rows: Sort by key:

COURSEWORK 3

LEARNING EXPERIENCES

In hierarchical databases, model data is organised in the form of a tree-like pattern. Data storage can be up or down, and a parent-child connection is used to explain it. The data, the database system, and the sql database are all managed by DBMS, which allows users and other programmes to manipulate and extract data. This helps with data protection, backup and recovery, multitasking, and uniform data management. The network database approach meets the requirement for more complex relationships by allowing individual child to have several parents. Entities are organised in a graph which can be accessed through a variety of paths.

Data is kept as entities in device models, rather than rows and columns. It is built on device coding (OOP), which allows fields to be added to objects.

PROBLEM FACED

Database systems are complex, delicate, and time- consuming to design

If you're using the SELECT query, for example, make sure you specify the columns you want to handpick rather than merely utilising the SELECT * technique. SELECT * scans the entire table, which in most circumstances is entirely unnecessary.

LESSON LEARNED

The end result enables enterprises to locate valuable content, maintain digital content, and exercise it for education and learning reasons. In addition, the outcome includes tools for content verification, content searchability, resource classification, reporting, and more. The Assignments Learned Database is a centralised repository where companies can record and maintain their knowledge sessions and learning materials.

ACHIEVEMENT

A data visualization is a way to show data