

```
1. CREATE VIEW EmployeeInfo AS SELECT firstname, lastname, salary FROM
employee;
```

Database organisation

Structure for view employeeinfo

Column	Type	Null	Default
firstname	varchar(20)	Yes	NULL
lastname	varchar(20)	Yes	NULL
salary	int	Yes	NULL

Dumping data for table employeeinfo

Sam	Newton	50000
Elvin	Gomes	60000
Jack	Sparrow	75000

```
SELECT TABLE_NAME, IS_UPDATABLE
FROM INFORMATION_SCHEMA.VIEWS
WHERE TABLE_SCHEMA = 'organisation';
```

Database INFORMATION_SCHEMA

Table structure for table VIEWS

Column	Type	Null	Default
TABLE_CATALOG	varchar(64)	Yes	NULL
TABLE_SCHEMA	varchar(64)	Yes	NULL
TABLE_NAME	varchar(64)	Yes	NULL
VIEW_DEFINITION	longtext	Yes	NULL
CHECK_OPTION	enum('NONE', 'LOCAL', 'CASCADED')	Yes	NULL
IS_UPDATABLE	enum('NO', 'YES')	Yes	NULL
DEFINER	varchar(288)	Yes	NULL
SECURITY_TYPE	varchar(7)	Yes	NULL
CHARACTER_SET_CLIENT	varchar(64)	No	
COLLATION_CONNECTION	varchar(64)	No	

Dumping data for table VIEWS

employeeinfo	YES
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2. create view clientinfo as select client_id, clientName from client;

Database organisation

Structure for view clientinfo

Column	Type	Null	Default
client_id	varchar(20)	Yes	NULL
clientName	varchar(20)	Yes	NULL

Dumping data for table clientinfo

C1	Microsoft
C2	Google

```
SELECT TABLE_NAME, IS_UPDATABLE
FROM INFORMATION_SCHEMA.VIEWS
WHERE TABLE_SCHEMA = 'organisation' AND TABLE_NAME='clientinfo';
```

Database INFORMATION_SCHEMA

Table structure for table VIEWS

Column	Type	Null	Default
TABLE_CATALOG	varchar(64)	Yes	NULL
TABLE_SCHEMA	varchar(64)	Yes	NULL
TABLE_NAME	varchar(64)	Yes	NULL
VIEW_DEFINITION	longtext	Yes	NULL
CHECK_OPTION	enum('NONE', 'LOCAL', 'CASCADED')	Yes	NULL
IS_UPDATABLE	enum('NO', 'YES')	Yes	NULL
DEFINER	varchar(288)	Yes	NULL
SECURITY_TYPE	varchar(7)	Yes	NULL
CHARACTER_SET_CLIENT	varchar(64)	No	
COLLATION_CONNECTION	varchar(64)	No	

Dumping data for table VIEWS

clientinfo

YES

```
3. CREATE VIEW employeetotalsales AS SELECT e.emp_id,  
    e.firstname,e.lastname,w.totalSales  
FROM employee e JOIN workswith w ON e.emp_id = w.emp_id;
```

Database organisation

Structure for view employeetotalsales

Column	Type	Null	Default
emp_id	int	Yes	NULL
firstname	varchar(20)	Yes	NULL
lastname	varchar(20)	Yes	NULL
totalSales	varchar(20)	Yes	NULL

Dumping data for table employeetotalsales

101	Sam	Newton	1 Million
102	Elvin	Gomes	10 Million
103	Jack	Sparrow	5 Lakh

```
SELECT TABLE_NAME, IS_UPDATABLE  
FROM INFORMATION_SCHEMA.VIEWS  
WHERE TABLE_SCHEMA = 'organisation' AND TABLE_NAME=' employeetotalsales ';
```

Database INFORMATION_SCHEMA

Table structure for table VIEWS

Column	Type	Null	Default
TABLE_CATALOG	varchar(64)	Yes	NULL
TABLE_SCHEMA	varchar(64)	Yes	NULL
TABLE_NAME	varchar(64)	Yes	NULL

VIEW_DEFINITION	longtext	Yes	NULL
CHECK_OPTION	enum('NONE', 'LOCAL', 'CASCADED')	Yes	NULL
IS_UPDATABLE	enum('NO', 'YES')	Yes	NULL
DEFINER	varchar(288)	Yes	NULL
SECURITY_TYPE	varchar(7)	Yes	NULL
CHARACTER_SET_CLIENT	varchar(64)	No	
COLLATION_CONNECTION	varchar(64)	No	

Dumping data for table VIEWS

employeetotalsales	YES
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```

4. CREATE VIEW ManagerClients AS SELECT b.mgr_id, e.firstname AS
manager_firstname,
e.lastname AS manager_lastname,c.client_id,c.clientName
FROM branch b
JOIN employee e ON b.mgr_id = e.emp_id
JOIN client c ON b.branch_id = c.branchid;

```

Database organisation

Structure for view managerclients

Column	Type	Null	Default
mgr_id	int	Yes	NULL
manager_firstname	varchar(20)	Yes	NULL
manager_lastname	varchar(20)	Yes	NULL
client_id	varchar(20)	Yes	NULL
clientName	varchar(20)	Yes	NULL

Dumping data for table managerclients

101	Sam	Newton	C2	Google
103	Jack	Sparrow	C1	Microsoft

```

5. CREATE VIEW EmployeeClients AS SELECT e.emp_id, e.firstname AS
    employee_firstname,e.lastname AS employee_lastname, c.client_id,
    c.clientName FROM employee e
JOIN workswith w ON e.emp_id = w.emp_id
JOIN client c ON w.client_id = c.client_id;

```

Database organisation

Structure for view employeeclients

Column	Type	Null	Default
emp_id	int	Yes	NULL
employee_firstname	varchar(20)	Yes	NULL
employee_lastname	varchar(20)	Yes	NULL
client_id	varchar(20)	Yes	NULL
clientName	varchar(20)	Yes	NULL

Dumping data for table employeeclients

101	Sam	Newton	C1	Microsoft
102	Elvin	Gomes	C2	Google
103	Jack	Sparrow	C1	Microsoft

```

6. CREATE VIEW EmployeeBranchClient AS
SELECT e.firstname AS employee_firstname, e.lastname AS
employee_lastname,b.branchName,c.clientName
FROM employee e
JOIN branch b ON e.branchid = b.branch_id
JOIN workswith w ON e.emp_id = w.emp_id
JOIN client c ON w.client_id = c.client_id;

```

Database organisation

Structure for view employeebranchclient

Column	Type	Null	Default
employee_firstname	varchar(20)	Yes	NULL

employee_lastname	varchar(20)	Yes	NULL
branchName	varchar(20)	Yes	NULL
clientName	varchar(20)	Yes	NULL

Dumping data for table employeebranchclient

Jack	Sparrow	Admin	Microsoft
Sam	Newton	Finance	Microsoft
Elvin	Gomes	Admin	Google

7. CREATE VIEW EmployeesPerBranch AS

```
SELECT b.branch_id, b.branchName,COUNT(e.emp_id) AS numEmployees
FROM branch b
JOIN employee e ON b.branch_id = e.branchid
GROUP BY b.branch_id, b.branchName;
```

Database organisation

Structure for view employeesperbranch

Column	Type	Null	Default
branch_id	varchar(20)	Yes	NULL
branchName	varchar(20)	Yes	NULL
numEmployees	bigint	No	0

Dumping data for table employeesperbranch

B1	Finance	1
B2	Admin	2

8. SELECT * FROM EmployeeClients WHERE clientName = 'Google';

Database organisation

Structure for view EmployeeClients

Column	Type	Null	Default
emp_id	int	Yes	NULL

employee_firstname	varchar(20)	Yes	NULL
employee_lastname	varchar(20)	Yes	NULL
client_id	varchar(20)	Yes	NULL
clientName	varchar(20)	Yes	NULL

Dumping data for table EmployeeClients

102	Elvin	Gomes	C2	Google
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9. SELECT numEmployees from employeesperbranch WHERE branchName = "Finance";

Database organisation

Structure for view employeesperbranch

Column	Type	Null	Default
branch_id	varchar(20)	Yes	NULL
branchName	varchar(20)	Yes	NULL
numEmployees	bigint	No	0

Dumping data for table employeesperbranch

1

10. SELECT branch_id,branchName, MAX(numEmployees) AS maxNumEmployees FROM EmployeesPerBranch;

Database organisation

Structure for view EmployeesPerBranch

Column	Type	Null	Default
branch_id	varchar(20)	Yes	NULL
branchName	varchar(20)	Yes	NULL
numEmployees	bigint	No	0

Dumping data for table EmployeesPerBranch

B1	Finance	2
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