Simple Where Equal Statement using a table created by view command.

```
SELECT * FROM test1 WHERE HoursWorked == '45'
```

Export	EmployeeNumber	HoursWorked
1	7	45
2	8	45

Selects all tuples within department_data that have department name info systems using inner join.

```
SELECT * FROM department_data INNER JOIN employee_data ON department_data.DepartmentName = "InfoSystems"
```

Export	DepartmentName	BudgetCode	OfficeNumber	DepartmentPhone	EmployeeNumber	FirstName	LastName	Department
1	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	1	Mary	Jacobs	Administration
2	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	2	Rosalie	Jackson	Administration
3	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	3	Richard	Bandalone	Legal
4	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	4	George	Smith	Human Resources
5	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	5	Alan	Adams	Human Resources
6	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	6	Ken	Evans	Finance
7	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	7	Mary	Abernathy	Finance
8	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	8	Tom	Caruthers	Accounting
9	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	9	Heather	Jones	Accounting
10	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	10	Ken	Numoto	Sales and Marketing
11	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	11	Linda	Granger	Sales and Marketing
12	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	12	James	Nestor	InfoSystems
13	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	13	Rick	Brown	InfoSystems
14	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	14	Mike	Nguyen	Research and Development
15	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	15	Jason	Sleeman	Research and Development
16	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	16	Mary	Smith	Production
17	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	17	Tom	Jackson	Production
18	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	18	George	Jones	Production
19	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	19	Julia	Hayakawa	Production
20	InfoSystems	BC-700-10	BLDG02-210	360-285-8600	20	Sam	Stewart	Production

Selects last name and position from employee data but is grouped by department.

```
SELECT LastName, Position
From employee_data
GROUP BY Department
```

Export	LastName	Position
1	Jones	FA2
2	Jackson	Admin Assistant
3	Abernathy	FA3
4	Adams	HR1
5	Brown	IS2
6	Bandalone	Attorney
7	Stewart	OPS1
8	Sleeman	RD3
9	Granger	SM2

Creates a view from employee data where max hours of employee is 140.00

```
CREATE VIEW test2
AS
SELECT LastName, OfficePhone
FROM employee_data
WHERE Department = ( SELECT Department FROM project WHERE MaxHours = '145.00' );
```

no output

```
SELECT * FROM test2
```

Export	LastName	OfficePhone
1	Caruthers	360-285-8430
2	Jones	360-285-8440

Enter math.js or SQLite commands

Creates a view from assignments table where the project id was 1600.

```
CREATE VIEW test1
AS
SELECT EmployeeNumber, HoursWorked
FROM assignment
WHERE ProjectID = ( SELECT ProjectID FROM project WHERE ProjectID = '1600' );
```

no output

```
SELECT * FROM test1
```

Export	EmployeeNumber	HoursWorked
1	3	20
2	6	40
3	7	45
4	8	45

Sub-query technique is used to display last name and department where a phone number matches input phone number.

```
SELECT LastName, Department
FROM employee_data
WHERE Department = ( SELECT DepartmentName FROM department_data WHERE DepartmentPhone = '360-285-8800' );
```

Export	LastName	Department
1	Smith	Production
2	Jackson	Production
3	Jones	Production
4	Hayakawa	Production
5	Stewart	Production

Left Outer joins project table and eployee_data on department.

```
SELECT FirstName, LastName, ProjectID
FROM project LEFT OUTER JOIN employee_data
 ON employee_data.Department = project.Department
```

Export	FirstName	LastName	ProjectID
1	George	Jones	1000
2	Julia	Hayakawa	1000
3	Mary	Smith	1000
4	Sam	Stewart	1000
5	Tom	Jackson	1000
6	Ken	Numoto	1100
7	Linda	Granger	1100
8	Ken	Evans	1200
9	Mary	Abernathy	1200
10	Heather	Jones	1300
11	Tom	Caruthers	1300
12	George	Jones	1400
13	Julia	Hayakawa	1400
14	Mary	Smith	1400
15	Sam	Stewart	1400
16	Tom	Jackson	1400
17	Ken	Numoto	1500
18	Linda	Granger	1500
19	Ken	Evans	1600
20	Mary	Abernathy	1600

Inner join is used to join based on department name with the following columns selected

```
SELECT Position, LastName, DepartmentName, OfficeNumber
FROM employee_data
INNER JOIN department_data ON department_data.DepartmentName = employee_data.Department;
```

Export	Position	LastName	DepartmentName	OfficeNumber
1	CEO	Jacobs	Administration	BLDG01-210
2	Admin Assistant	Jackson	Administration	BLDG01-210
3	Attorney	Bandalone	Legal	BLDG01-220
4	HR3	Smith	Human Resources	BLDG01-230
5	HR1	Adams	Human Resources	BLDG01-230
6	CFO	Evans	Finance	BLDG01-110
7	FA3	Abernathy	Finance	BLDG01-110
8	FA2	Caruthers	Accounting	BLDG01-120
9	FA2	Jones	Accounting	BLDG01-120
10	SM3	Numoto	Sales and Marketing	BLDG01-250
11	SM2	Granger	Sales and Marketing	BLDG01-250
12	CIO	Nestor	InfoSystems	BLDG02-210
13	IS2	Brown	InfoSystems	BLDG02-210
14	CTO	Nguyen	Research and Development	BLDG02-250
15	RD3	Sleeman	Research and Development	BLDG02-250
16	OPS3	Smith	Production	BLDG02-110
17	OPS2	Jackson	Production	BLDG02-110
18	OPS2	Jones	Production	BLDG02-110
19	OPS1	Hayakawa	Production	BLDG02-110
20	OPS1	Stewart	Production	BLDG02-110

SQLite Chart

P2 Department Data
- DepartmentName : varchar(50)
- BudgetCode : varchar(50)
- OfficeNumber : varchar(50)
- DepartmentPhone : varchar(50)

P2 Project
- ProjectID : int(11)
- ProjectName : varchar(50)
- Department : varchar(50)
- MaxHours : decimal(6,2)
- StartDate : date
- EndDate : date

P2 Assignment
- ProjectID : int(11)
- EmployeeNumber : int(11)
- HoursWorked : decimal(4,2)

P2 Employee Data
- EmployeeNumber : int(11)
- FirstName : varchar(50)
- LastName : varchar(50)
- Department : varchar(50)
- Position : varchar(50)
- Supervisor : int(11)
- OfficePhone : varchar(50)
- EmailAddress : varchar(50)