

SQL Definitions & Sample SQL's (Selected, Query, Lists)

SELECT Statement

```
SELECT [Distinct] * | column_list  
FROM table_reference  
[WHERE table and/or fields and values]  
[ORDER by order_list]  
[GROUP by group_list]  
[HAVING having_condition]
```

Description

Use the SELECT statement to

- Retrieve a single row or part of a row, from a table
- Retrieve multiple rows or parts of rows, from a table
- Retrieve information from a join of two or more tables

The SELECT clause defines the list of items returned by the SELECT statement. It is composed of: table columns(field names), literal values, and these values modified by functions. Use an * to retrieve values from all columns. Field names for the SELECT clause may come from more than one table, but can only come from those tables listed in the FROM clause. The FROM clause identifies the table(s) from which data is retrieved.

Sample - data from two fields in a table:

```
SELECT FirstName, LastName  
FROM Youth2a
```

Use DISTINCT to limit the retrieved data to only distinct values needed in the table.

Sample:

```
SELECT Distinct Youth2a.MemberID, Youth2a.FirstName, Youth2a.LastName,  
Youth2d.ProjectID  
FROM "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
On (Youth2a.MemberID = Youth2d.MemberID)  
Where Youth2d.ProjectID = 'GBHA'
```

Sample SQLs

1- Choosing members by county, age, residence, ethnic, and category – all from one table.

```
Select CountyID, MemberID, Category, Residence, Age, Ethnic  
From Youth2a.db
```

Where IN ('11', '12', '13', '14')
Order by CountyID, Age, Residence, Ethnic

2- This selects all members using an outer join off of the source table and shows members who have projects with their clubs.

```
SELECT d.ClubID, d.ProjectID, a.MemberID, a.LastName, a.FirstName, a.Address,  
a.City, a.State, a.Zip  
FROM "Youth2a.db" a  
LEFT OUTER JOIN "Youth2d.db" d  
ON (d.MemberID = a.MemberID)  
ORDER BY ClubID, LastName, FirstName
```

3- This SQL shows All kids (category Members – if you want others you will need to include them) who completed at least one project, with their Year in 4H.

```
SELECT DISTINCT Youth2a.MemberID, Youth2a.FirstName, Youth2a.LastName,  
Youth2a.Year4H  
FROM "Youth2a.DB" Youth2a  
INNER JOIN "Youth2d.DB" Youth2d  
ON (Youth2a.MemberID = Youth2d.MemberID)  
INNER JOIN "Youth2c.db" Youth2c  
ON (Youth2d.ProjectID = Youth2c.ProjectID)  
WHERE (Youth2d.Completed = 'True')  
AND Youth2a.Status IN ('N', 'R')  
AND (Youth2a.Category = 'M')  
Order by Youth2a.Year4H  
Windows Youth Enrollment  
Appendix H-12
```

4- SQL shows joining tables and showing specific projects, grade, for members and others

```
Select Distinct Youth2a.MemberID, Youth2d.ProjectID, Youth2a.FirstName,  
Youth2a.LastName, Youth2a.Grade, Youth2a.Status, Youth2a.Category  
From "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
On (Youth2a.MemberID = Youth2d.MemberID)  
Inner Join "Youth2h" Youth2h  
On (Youth2a.MemberID = Youth2h.MemberID)  
Where Youth2d.ProjectID IN ('BCA', 'GCB')  
And Youth2a.Category IN ("M", "O")  
And Youth2a.Status IN ("N", "R")  
And Youth2h.ActivityID NOT IN ('100', '110')  
Order by Youth2a.LastName, Youth2a.FirstName
```

5- This shows joining two tables members, a specific project ordered by grade

```
Select Youth2a.MemberID, Youth2d.ProjectID, Youth2a.FirstName,  
Youth2a.LastName, Youth2a.Grade, Youth2a.Sex  
From "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
On (Youth2a.MemberID = Youth2d.MemberID)  
Where ProjectID = '740'  
Order by Youth2a.Grade
```

6- This shows joining three tables with names, projects and social security numbers.

```
Select Youth2a.MemberID, Youth2d.ProjectID, Youth2c."Desc",  
Youth2a.FirstName, Youth2a.LastName, Youth2a.SocSec  
From "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
on (Youth2a.MemberID = Youth2d.MemberID)  
Inner Join "Youth2c.db" Youth2c  
on (Youth2d.ProjectID = Youth2c.ProjectID)  
Order by Youth2d.ProjectID, Youth2a.LastName, Youth2a.FirstName
```

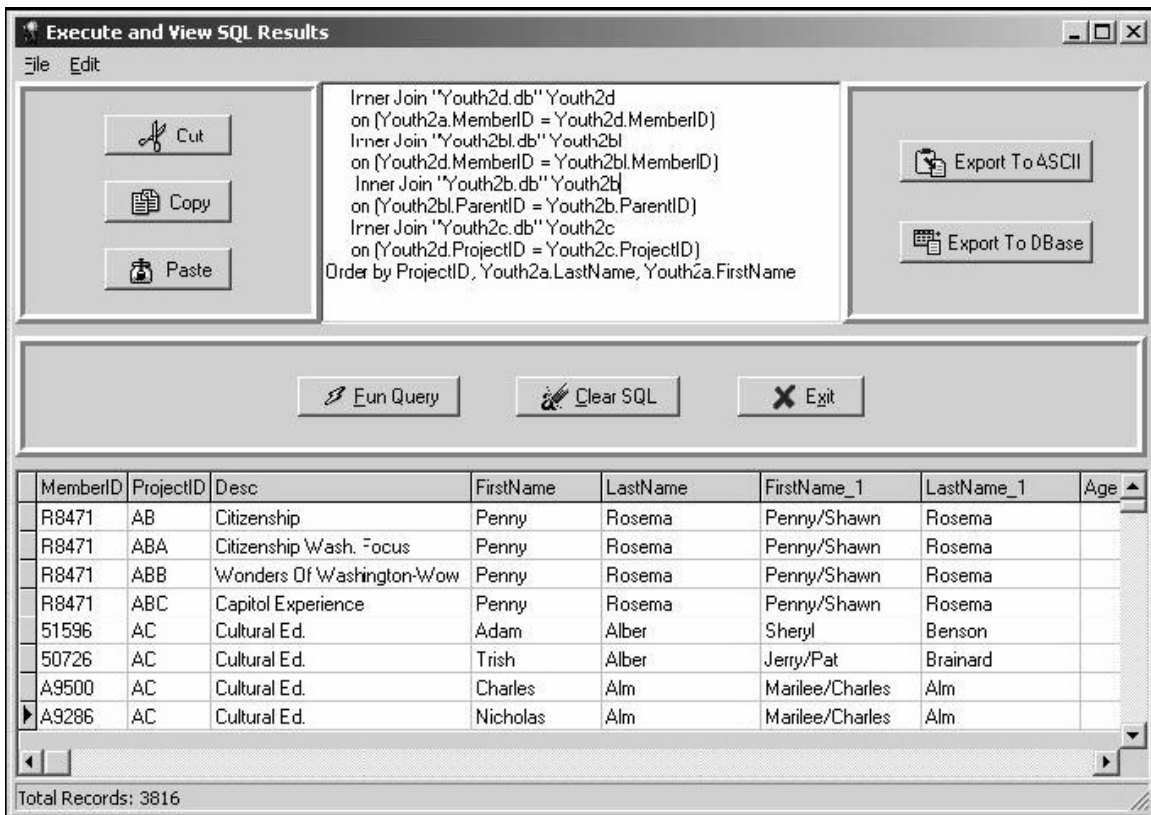
7- If you want to choose a certain project and want to make sure that you have only New and Return (status), then you need to add it like the sample shows before the Order By statement.

```
Select Youth2a.MemberID, Youth2d.ProjectID, Youth2c."Desc",  
Youth2a.FirstName, Youth2a.LastName, Youth2a.SocSec, Youth2a.Status  
From "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
on (Youth2a.MemberID = Youth2d.MemberID)  
Inner Join "Youth2c.db" Youth2c  
on (Youth2d.ProjectID = Youth2c.ProjectID)  
Where Youth2d.ProjectID IN ('1030', '1011')  
And Youth2a.Status In ("N", "R")  
Order by Youth2d.ProjectID, Youth2a.LastName, Youth2a.FirstName
```

8- This shows joining a few tables on members, with parent information and project information.

```
Select Youth2a.MemberID, Youth2d.ProjectID, Youth2c."Desc",  
Youth2a.FirstName, Youth2a.LastName, Youth2b.FirstName, Youth2b.LastName,  
Youth2a.Age, Youth2a.ClubID  
From "Youth2a.db" Youth2a  
Inner Join "Youth2d.db" Youth2d  
on (Youth2a.MemberID = Youth2d.MemberID)  
Inner Join "Youth2bl.db" Youth2bl  
on (Youth2d.MemberID = Youth2bl.MemberID)  
Inner Join "Youth2b.db" Youth2b  
on (Youth2bl.ParentID = Youth2b.ParentID)
```

Inner Join "Youth2c.db" Youth2c
 on (Youth2d.ProjectID = Youth2c.ProjectID)
 Order by ProjectID, Youth2a.LastName, Youth2a.FirstName



9- This shows joining a few tables on members, social security numbers of members, project information and with parent information.

```

Select Youth2a.MemberID, Youth2d.ProjectID, Youth2c."Desc",
Youth2a.FirstName, Youth2a.LastName, Youth2b.FirstName, Youth2b.LastName,
Youth2a.Age, Youth2a.ClubID, Youth2a.SocSec, Youth2a.Address, Youth2a.City,
Youth2a.State, Youth2a.Zip
From "Youth2a.db" Youth2a
Inner Join "Youth2d.db" Youth2d
on (Youth2a.MemberID = Youth2d.MemberID)
Inner Join "Youth2bl.db" Youth2bl
on (Youth2d.MemberID = Youth2bl.MemberID)
Inner Join "Youth2b.db" Youth2b
on (Youth2bl.ParentID = Youth2b.ParentID)
Inner Join "Youth2c.db" Youth2c
on (Youth2d.ProjectID = Youth2c.ProjectID)
Order by ProjectID, Youth2a.LastName, Youth2a.FirstName
  
```

Execute and View SQL Results

File Edit

Cut

Copy

Paste

```

Inner Join "Youth2d.db" Youth2d
on (Youth2a.MemberID = Youth2d.MemberID)
Inner Join "Youth2bl.db" Youth2bl
on (Youth2d.MemberID = Youth2bl.MemberID)
Inner Join "Youth2b.db" Youth2b
on (Youth2bl.ParentID = Youth2b.ParentID)
Inner Join "Youth2c.db" Youth2c
on (Youth2d.ProjectID = Youth2c.ProjectID)
Order by ProjectID, Youth2a.LastName, Youth2a.FirstName
          
```

Export To ASCII

Export To DBase

Run Query
 Clear SQL
 Exit

MemberID	ProjectID	Desc	FirstName	LastName	FirstName_1	LastName_1	Age
C4940	AB	Citizenship	Valerie	Chase	Donald/Barbara	Chase	
D0850	AB	Citizenship	Cherish	DeWitt	Tammy	DeWitt	
D2570	AB	Citizenship	Eileen	Dittmar	Eileen & Larry	Dittmar	
R8471	AB	Citizenship	Penny	Rosema	Penny/Shawn	Rosema	
R8471	ABA	Citizenship Wash. Focus	Penny	Rosema	Penny/Shawn	Rosema	
R8471	ABB	Wonders Of Washington-Wow	Penny	Rosema	Penny/Shawn	Rosema	
R8471	ABC	Capitol Experience	Penny	Rosema	Penny/Shawn	Rosema	
51596	AC	Cultural Ed.	Adam	Alber	Sheryl	Benson	

Total Records: 3816