--Using Aliases to rename both the columns and the tables for clarity

SELECT [DepartmentID]

,[Name]

,[GroupName]

,[ModifiedDate]

FROM [AdventureWorks2012].[HumanResources].[Department]

--Using aliases with brackets to rename columns

SELECT Name AS DeptName, GroupName AS [Area of Expertise]--<< Note the brackets needed because of space between column alias

FROM [AdventureWorks2012].[HumanResources].[Department];

--Using aliases with concatenation

SELECT [DepartmentID]

,[Name]

,[GroupName]

,[Name]+', '+[GroupName] AS ConcatenateFields--<< Concatinating fields

FROM [AdventureWorks2012].[HumanResources].[Department];

--Create 2 tables for testing aliases

Create Table Orders

(OrderID int,

OrderNumber Varchar (20),

ProductName varchar (30),

Quantity int

)

Create Table Product

(ProductID int,

ProductNumber Varchar (20),

ProductName varchar (30),

Quantity int

)

select \* from Orders

select \* from Product

--Insert records

Insert Into Orders

Values

(1,555666,'Ball',10),

(2,777222,'Pen',103),

(3,333252,'Bat',5),

(4,251414,'Book',77),

(5,956212,'Towel',89)

Insert Into Product

Values

(1,434,'Ball',333),

(2,565,'Pen',5666),

(3,234,'Bat',3),

(4,678,'Book',7789),

(5,789,'Towel',33)

--Using aliases to rename columns and tables for efficincy and distinguishing fields

--Original join without aliases

SELECT

Orders.OrderID AS Expr4,

Product.ProductName AS Expr6,

Orders.Quantity AS Expr3,

Product.Quantity AS Expr1

FROM

Orders

INNER JOIN

Product ON Orders.OrderID = Product.ProductID

--Join with aliases (substituting o. for Orders fields and p. for Products fields)

SELECT

o.OrderID,

p.ProductName,

o.Quantity,

p.Quantity AS QuantityProducts

FROM

Orders as o --<< Note that for the table alias, we use the key word AS followed by the alias

INNER JOIN

Product as p --<< Note that for the table alias, we use the key word AS followed by the alias

ON o.OrderID = p.ProductID