

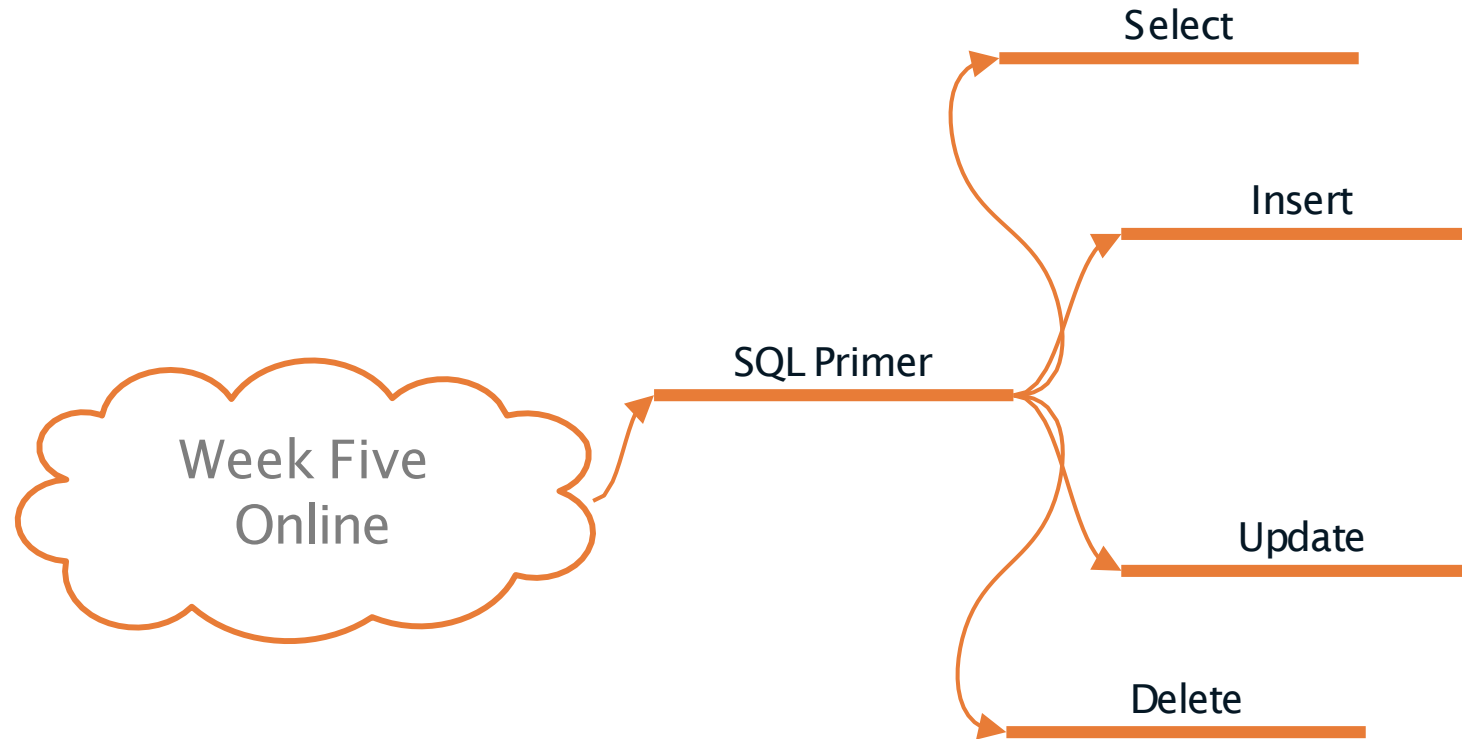
# COMP 3602

C# Application Development

Week Five - Online



# This Week's Learning Outcomes



# Select Statement

```
1 SELECT * FROM Customers
```

The Select statement is used to read data from a data table.

Select \* brings back all fields from all records.

	CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country	Phone	Fax
1	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	NULL	12209	Germany	030-0074321	030-0076545
2	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	NULL	05021	Mexico	(5) 555-4729	(5) 555-3745
3	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	NULL	05023	Mexico	(5) 555-3932	NULL
4	AROUT	Around the Hom	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	NULL	WA1 1DP	UK	(171) 555-7788	(171) 555-6750
5	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	NULL	S-958 22	Sweden	0921-12 34 65	0921-12 34 67
6	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	NULL	68306	Germany	0621-08460	0621-08924
7	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	NULL	67000	France	88.60.15.31	88.60.15.32
8	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	NULL	28023	Spain	(91) 555 22 82	(91) 555 91 99
9	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	NULL	13008	France	91.24.45.40	91.24.45.41
10	BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729	(604) 555-3745
11	BSBEV	B's Beverages	Victoria Ashworth	Sales Representative	Fauntleroy Circus	London	NULL	EC2 5NT	UK	(171) 555-1212	NULL
12	CACTU	Cactus Comidas para llevar	Patricio Simpson	Sales Agent	Cenito 333	Buenos Aires	NULL	1010	Argentina	(1) 135-5555	(1) 135-4892
13	CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager	Sierras de Granada 9993	México D.F.	NULL	05022	Mexico	(5) 555-3392	(5) 555-7293
14	CHOPS	Chop-suey Chinese	Yang Wang	Owner	Hauptstr. 29	Bern	NULL	3012	Switzerland	0452-076545	NULL
15	COMMI	Comércio Mineiro	Pedro Afonso	Sales Associate	Av. dos Lusíadas, 23	Sao Paulo	SP	05432-043	Brazil	(11) 555-7647	NULL
16	CONSH	Consolidated Holdings	Elizabeth Brown	Sales Representative	Berkeley Gardens 12 Brewery	London	NULL	WX1 6LT	UK	(171) 555-2282	(171) 555-9199
17	DRACD	Drachenblut Delikatessen	Sven Ottilieb	Order Administrator	Walsenweg 21	Aachen	NULL	52066	Germany	0241-039123	0241-059428
18	DUMON	Du monde entier	Janine Labrune	Owner	67, rue des Cinquante Otages	Nantes	NULL	44000	France	40.67.88.88	40.67.89.89
19	EASTC	Eastern Connection	Ann Devon	Sales Agent	35 King George	London	NULL	WX3 6FW	UK	(171) 555-0297	(171) 555-3373

# Where Clause

```
1 SELECT * FROM Customers
2 WHERE Country = 'Canada'
3
```

The Where clause is used to filter records based on a certain field value. Multiple fields can be used with AND/OR logic.

	CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country	Phone	Fax
1	BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729	(604) 555-3745
2	LAUGB	Laughing Bacchus Wine Cellars	Yoshi Tannamuri	Marketing Assistant	1900 Oak St.	Vancouver	BC	V3F 2K1	Canada	(604) 555-3392	(604) 555-7293
3	MEREP	Mère Paillarde	Jean Fresnière	Marketing Assistant	43 rue St. Laurent	Montréal	Québec	H1J 1C3	Canada	(514) 555-8054	(514) 555-8055

```
1 SELECT * FROM Customers
2 WHERE Country = 'Canada'
3 AND Region = 'BC'
4
```

	CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country	Phone	Fax
1	BOTTM	Bottom-Dollar Markets	Janet Wilke	Marketing Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729	(604) 555-3745
2	LAUGB	Laughing Bacchus Wine Cellars	Yoshi Tannamuri	Marketing Assistant	1900 Oak St.	Vancouver	BC	V3F 2K1	Canada	(604) 555-3392	(604) 555-7293

# Select Statement - Projection

```
1 SELECT CustomerId, CompanyName, ContactName, ContactTitle
2 FROM Customers
3 WHERE Country = 'Canada'
4
```

You can limit the number of fields returned by specifying a comma separated list of the desired fields.

	CustomerId	CompanyName	ContactName	ContactTitle
1	BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager
2	LAUGB	Laughing Bacchus Wine Cellars	Yoshi Tannamuri	Marketing Assistant
3	MEREP	Mère Paillarde	Jean Fresnière	Marketing Assistant

# Update Statement

Before  
Update

	CustomerId	CompanyName	ContactName	ContactTitle
1	BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager
2	LAUGB	Laughing Bacchus Wine Cellars	Yoshi Tannamuri	Marketing Assistant
3	MEREP	Mère Paillarde	Jean Fresnière	Marketing Assistant

Update  
Statement

```
1 UPDATE Customers
2   SET ContactName = 'Janet Wilke'
3     , ContactTitle = 'Marketing Manager'
4   WHERE CustomerId = 'BOTTM'
5
```

After  
Update

	CustomerId	CompanyName	ContactName	ContactTitle
1	BOTTM	Bottom-Dollar Markets	Janet Wilke	Marketing Manager
2	LAUGB	Laughing Bacchus Wine Cellars	Yoshi Tannamuri	Marketing Assistant
3	MEREP	Mère Paillarde	Jean Fresnière	Marketing Assistant

You can modify values in a record using the Update statement.

Use the Set keyword with a comma separated list of Field = Value.

Use a Where clause to limit the number of records affected.

# Insert Statement

```
1 SELECT * FROM Region
2
3
```

Before  
Insert

	RegionID	RegionDescription
1	1	Eastern
2	2	Western
3	3	Northern
4	4	Southern

Insert  
Statement

```
1 INSERT INTO Region
2 (RegionId, RegionDescription)
3 VALUES (5, 'Central')
4
```

The Insert statement is used to  
add records to a data table.

After  
Insert

	RegionID	RegionDescription
1	1	Eastern
2	2	Western
3	3	Northern
4	4	Southern
5	5	Central



# Delete Statement

```
1 SELECT * FROM Region
2
3
```

Before  
Delete

	RegionID	RegionDescription
1	1	Eastern
2	2	Western
3	3	Northern
4	4	Southern
5	5	Central

Delete  
Statement

```
1 DELETE Region
2 WHERE RegionID = 5
3
```

After  
Delete

	RegionID	RegionDescription
1	1	Eastern
2	2	Western
3	3	Northern
4	4	Southern

The Delete statement is used to remove records from a data table.

Use a Where clause to specify the record or records to be deleted.