

IS 475/675 - HW #6**1. Code**

```

Select      (FirstName + ' ' + LastName) CustomerName,
            Phone CustomerPhone,
            City,
            State,
            FirstBuyDate
From        tblCustomer
Where       State = 'NV'
Order By    LastName;

```

1. Output

	CustomerName	CustomerPhone	City	State	FirstBuyDate
1	Margaret Barrington	7757464561	reno	nv	2006-07-12 00:00:00.000
2	Lian Chen	7757218991	REno	Nv	1999-08-30 00:00:00.000
3	Brittany Cranston	7753312199	Sparks	NV	2014-04-12 00:00:00.000
4	Janice Jackson	7753317188	Sparks	NV	2014-05-06 00:00:00.000
5	Martin Jones	7753314838	reno	nv	2016-02-12 00:00:00.000
6	Guadalupe Martinez	7758837612	Reno	NV	2012-02-14 00:00:00.000
7	Kendall Phillips	7753324636	SPARKS	nv	2000-08-12 00:00:00.000
8	Tiffany Polanski	7757465771	RENO	NV	2011-08-23 00:00:00.000

2. Code

```

Select      (LastName + ', ' + SUBSTRING(FirstName,1,1) + '.') 'Customer Name',
            '(' + SUBSTRING(Phone,1,3) + ') ' + SUBSTRING(Phone,4,3) + '-' + SUBSTRING(Phone,7,4) 'Phone Number',
            UPPER(City) City,
            UPPER(State) State,
            CONVERT(varchar, FirstBuyDate, 107) FirstBuyDate
From        tblCustomer
Where       State = 'NV'
Order By    LastName;

```

2. Output

	Customer Name	Phone Number	City	State	FirstBuyDate
1	Barrington, M.	(775) 746-4561	RENO	NV	Jul 12, 2006
2	Chen, L.	(775) 721-8991	RENO	NV	Aug 30, 1999
3	Cranston, B.	(775) 331-2199	SPARKS	NV	Apr 12, 2014
4	Jackson, J.	(775) 331-7188	SPARKS	NV	May 06, 2014
5	Jones, M.	(775) 331-4838	RENO	NV	Feb 12, 2016
6	Martinez, G.	(775) 883-7612	RENO	NV	Feb 14, 2012
7	Phillips, K.	(775) 332-4636	SPARKS	NV	Aug 12, 2000
8	Polanski, T.	(775) 746-5771	RENO	NV	Aug 23, 2011

3. Code

```
Select      CONVERT(varchar, OrderDate, 101) 'Date of Order',
            OrderID 'Order Number',
            CustomerID 'Customer Number',
            CreditCode 'Credit Code'

From        tblOrder
Where       DiscountCode IS NULL
Order By    OrderDate;
```

3. Output

	Date of Order	Order Number	Customer Number	Credit Code
1	12/28/2015	675990	00625	111
2	12/28/2015	892211	00625	111
3	12/29/2015	450137	07831	444
4	01/26/2016	567123	07831	444
5	01/26/2016	200335	07831	111
6	01/29/2016	651222	12006	111
7	02/09/2016	223344	21142	231
8	02/19/2016	983983	32018	111
9	02/19/2016	671100	32018	111

4. Code

```
Select      OrderID OrderNumber,
            ItemID ItemNumber,
            Quantity QuantityOrdered,
            Price PricePaid,
            (Price * Quantity) ExtendedPrice
From        tblOrderLine
Where       ItemID = 'A34665'
Order By    OrderID;
```

4. Output

	OrderNumber	ItemNumber	QuantityOrdered	PricePaid	ExtendedPrice
1	123000	A34665	30	37.95	1138.50
2	200335	A34665	1	34.95	34.95
3	223344	A34665	100	23.95	2395.00
4	300221	A34665	1	35.95	35.95
5	450137	A34665	10	31.00	310.00
6	651222	A34665	5	37.95	189.75

5. Code

```
Select      OrderID OrderNumber,
            ItemID ItemNumber,
            Quantity QuantityOrdered,
            Price PricePaid,
            (Price * Quantity) ExtendedPrice
From        tblOrderLine
Where       (Price * Quantity) > 800
Order By    OrderID, ItemID;
```

5. Output

	OrderNumber	ItemNumber	QuantityOrdered	PricePaid	ExtendedPrice
1	123000	A34665	30	37.95	1138.50
2	123000	B67123	5	389.99	1949.95
3	223344	A23441	55	29.95	1647.25
4	223344	A23771	15	122.99	1844.85
5	223344	A34665	100	23.95	2395.00
6	223344	B67123	25	34.95	873.75
7	445511	C34122	3	269.95	809.85
8	450137	A23771	16	135.99	2175.84
9	450137	C26133	4	398.95	1595.80
10	450137	C34122	6	167.95	1007.70
11	892211	C26133	15	380.00	5700.00
12	892211	C29179	10	259.95	2599.50
13	892211	C34122	8	200.00	1600.00
14	980001	C29179	3	275.99	827.97

6. Code

```
Select      OrderID OrderNumber,
            ItemID ItemNumber,
            Quantity QuantityOrdered,
            Price PricePaid,
            (Price * Quantity) ExtendedPrice,
            CASE
                WHEN (Price * Quantity) >= 5000 THEN '***Closely Watch the Status***'
                WHEN (Price * Quantity) >= 2000 and (Price * Quantity) < 5000 THEN 'Very Large Order - Watch Dates'
                WHEN (Price * Quantity) >= 1500 and (Price * Quantity) < 2000 THEN 'Large Order - Monitor'
                WHEN (Price * Quantity) >= 1000 and (Price * Quantity) < 1500 THEN 'Medium Order'
                ELSE NULL
            END      OrderStatusMessage
From      tblOrderLine
Where      (Price * Quantity) > 800
Order By   OrderID, ItemID;
```

6. Output

	OrderNumber	ItemNumber	QuantityOrdered	PricePaid	ExtendedPrice	OrderStatusMessage
1	123000	A34665	30	37.95	1138.50	Medium Order
2	123000	B67123	5	389.99	1949.95	Large Order - Monitor
3	223344	A23441	55	29.95	1647.25	Large Order - Monitor
4	223344	A23771	15	122.99	1844.85	Large Order - Monitor
5	223344	A34665	100	23.95	2395.00	Very Large Order - Watch Dates
6	223344	B67123	25	34.95	873.75	NULL
7	445511	C34122	3	269.95	809.85	NULL
8	450137	A23771	16	135.99	2175.84	Very Large Order - Watch Dates
9	450137	C26133	4	398.95	1595.80	Large Order - Monitor
10	450137	C34122	6	167.95	1007.70	Medium Order
11	892211	C26133	15	380.00	5700.00	***Closely Watch the Status***
12	892211	C29179	10	259.95	2599.50	Very Large Order - Watch Dates
13	892211	C34122	8	200.00	1600.00	Large Order - Monitor
14	980001	C29179	3	275.99	827.97	NULL

7. Code

```
Select      OrderID,
            ItemID,
            CONVERT(varchar, DateShipped, 101) DateShipped,
            QtyShipped,
            UPPER(MethodShipped) MethodShipped
From        tblShipLine
Where       YEAR(DateShipped) = YEAR(GETDATE()) and (MONTH(DateShipped) = 1)
Order By    OrderID, ItemID;
```

7. Output

	OrderID	ItemID	DateShipped	QtyShipped	MethodShipped
1	450137	B67123	01/19/2016	8	UPS
2	450137	B67123	01/27/2016	3	UPS
3	450137	B67123	01/27/2016	14	UPS
4	450137	B67123	01/27/2016	4	UPS
5	892211	C29179	01/23/2016	6	UPS
6	892211	C34122	01/23/2016	2	UPS
7	892211	C34122	01/23/2016	3	UPS

8. Code

```
Select      CONVERT(varchar, MIN(FirstBuyDate), 107) 'Earliest First Buy Date'
From        tblCustomer;
```

8. Output

	Earliest First Buy Date
1	Aug 15, 1999

9. Code

```
Select      ROUND(AVG(Price), 2) 'Average Selling Price'
From        tblOrderLine
Where       ItemID = 'A34665';
```

9. Output

	Average Selling Price
1	33.63

10. Code

```
Select      ItemID itemid,  
            Count(ItemID) NumberOfRows,  
            SUM(Quantity) QuantitySold,  
            MIN(Price) MinimumPrice,  
            MAX(Price) MaximumPrice,  
            AVG(Price) AveragePrice  
From        tblOrderLine  
Group By    ItemID;
```

10. Output

	itemid	NumberOfRows	QuantitySold	MinimumPrice	MaximumPrice	AveragePrice
1	A23441	3	64	29.95	29.95	29.95
2	A23771	4	33	122.99	145.99	135.24
3	A34665	6	147	23.95	37.95	33.625
4	A34882	4	102	7.95	11.95	10.20
5	B67123	5	53	14.95	389.99	103.974
6	B67466	4	26	40.95	43.95	42.70
7	B78244	3	40	17.99	19.95	18.9633
8	C26133	4	21	380.00	398.95	392.7125
9	C29179	4	16	259.95	280.00	268.9725
10	C34122	4	19	167.95	269.95	201.9625

11. Code

```
Select      ItemID itemid,  
            Count(ItemID) NumberOfRows,  
            SUM(Quantity) QuantitySold,  
            MIN(Price) MinimumPrice,  
            MAX(Price) MaximumPrice,  
            ROUND(AVG(Price), 2) AveragePrice,  
            FORMAT(((MAX(Price) - MIN(Price)) / MIN(Price)), 'p') Diff  
From        tblOrderLine  
Group By    ItemID  
Having      (MAX(Price) - MIN(Price)) / MIN(Price) > 0.5
```

11. Output

	itemid	NumberOfRows	QuantitySold	MinimumPrice	MaximumPrice	AveragePrice	Diff
1	A34665	6	147	23.95	37.95	33.63	58.45 %
2	A34882	4	102	7.95	11.95	10.20	50.31 %
3	B67123	5	53	14.95	389.99	103.97	2,508.62 %
4	C34122	4	19	167.95	269.95	201.96	60.73 %

12. Code

```
Select      OrderID 'Order Number',
            CustomerID 'Customer Number',
            CONVERT(varchar, OrderDate, 107) 'Date Ordered',
            CONVERT(varchar, DATEADD(day, 40, OrderDate), 107) '40 Days After Date Ordered',
            DATEDIFF(day, OrderDate, GETDATE()) 'Number of Days Difference',
            GETDATE() 'Current Date and Time'

From        tblOrder

Where       DATEDIFF(day, OrderDate, GETDATE()) > 40;
```

12. Output

	Order Number	Customer Number	Date Ordered	40 Days After Date Ordered	Number of Days Difference	Current Date and Time
1	450137	07831	Dec 29, 2015	Feb 07, 2016	63	2016-03-01 22:06:04.240
2	675990	00625	Dec 28, 2015	Feb 06, 2016	64	2016-03-01 22:06:04.240
3	892211	00625	Dec 28, 2015	Feb 06, 2016	64	2016-03-01 22:06:04.240

13. Code

```
Select      OrderID,
            ItemID,
            COUNT(*) NumberOfShipments,
            SUM(QtyShipped) TotalShipped

From        tblShipLine

Group By    OrderID, ItemID

Having      COUNT(*) > 1

Order By    OrderID, ItemID;
```


13. Output

	OrderID	ItemID	NumberOfShipments	TotalShipped
1	223344	A23441	3	28
2	223344	A23771	4	45
3	223344	A34665	2	110
4	223344	A34882	2	35
5	223344	B67123	2	25
6	450137	B67123	4	29
7	651222	A34665	2	5
8	651222	A34882	6	68
9	892211	C29179	2	10
10	892211	C34122	2	5

14. Code

```
Select      CustomerID,
            (LastName + ', ' + SUBSTRING(FirstName,1,1) + '.') CustomerName,
            '(' + SUBSTRING(Phone,1,3) + ')' + SUBSTRING(Phone,4,3) + '-' + SUBSTRING(Phone,7,4) PhoneNumber,
            UPPER(City) City,
            UPPER(State) State
From        tblCustomer
Where       CustomerID NOT IN
            (Select CustomerID
             From   tblOrder);
```

14. Output

	CustomerID	CustomerName	PhoneNumber	City	State
1	06774	Phillips, K.	(775) 332-4636	SPARKS	NV
2	08892	Twillers, B.	(809) 829-1838	SAN JOSE	CA
3	12001	Cranston, B.	(775) 331-2199	SPARKS	NV
4	21143	Jackson, J.	(775) 331-7188	SPARKS	NV
5	29188	Polanski, T.	(775) 746-5771	RENO	NV
6	30192	Chen, L.	(775) 721-8991	RENO	NV
7	32817	Foster, B.	(858) 328-4483	SAN DIEGO	CA

15. Code

```
Select      CustomerID,
            (LastName + ', ' + SUBSTRING(FirstName,1,1) + '.') 'Customer Name',
            '(' + SUBSTRING(Phone,1,3) + ') ' + SUBSTRING(Phone,4,3) + '-' + SUBSTRING(Phone,7,4) 'Phone Number',
            UPPER(City) City,
            UPPER(State) State,
            CONVERT(varchar, FirstBuyDate, 107) 'First Purchase Date'
From      tblCustomer
Where     FirstBuyDate =
            (Select MAX(FirstBuyDate)
             From   tblCustomer);
```

15. Output

	CustomerID	Customer Name	Phone Number	City	State	First Purchase Date
1	32018	Jones, M.	(775) 331-4838	RENO	NV	Feb 12, 2016