

1.

```
1 SELECT VendorID,
2 Name
3 Address1 + ', ' + UPPER(LEFT(city, 1))+LOWER(SUBSTRING(city, 2, LEN(city))) + ', ' + UPPER(State)
4 '(' + Substring(Phone, 1, 3) + ')';
5 + Substring(Phone, 4, 3) + '-';
6 + Substring(Phone, 7, 4)
7 FROM Vendor
8 WHERE State = 'NV';
9
```

	VendorName	VendorAddress	VendorPhone
--	------------	---------------	-------------

	VendorID	VendorName	VendorAddress	VendorPhone
1	09567	Apex Mills	3500 Industrial Parkway, Sparks, NV	(775) 555-2894
2	17453	Albemarle Corporation	2355-B Vista Drive, Sparks, NV	(775) 555-3451
3	22890	Kitchen Chemicals Corp.	7750 Rock Blvd., Sparks, NV	(775) 555-2566

2.

```

1 SELECT      CONVERT(varchar, DateNeeded, 107)           'Date Needed',
2             ProductID                                   'Product Number',
3             PONumber                                    'Purchase Order Number',
4             QtyOrdered                                  'Quantity Ordered',
5             Price,
6             CAST((QtyOrdered * Price) AS DECIMAL(8,2)) 'Extended Price'
7 FROM        PurchaseOrderLine
8 WHERE       YEAR(DateNeeded) <> YEAR(GETDATE())
9 ORDER BY    DateNeeded;

```

	Date Needed	Product Number	Purchase Order Number	Quantity Ordered	Price	Extended Price
1	Jan 10, 2018	G1366	543791	48.00	1.89	90.72
2	Jan 10, 2018	G5698	543791	48.00	2.38	114.24
3	Jan 12, 2018	T0460	329987	50.00	3.10	155.00
4	Mar 14, 2018	T0460	365870	120.00	2.39	286.80

3.

```

1 SELECT MIN(Price) 'Least Expensive Selling Price for Product G5698'
2 FROM    PurchaseOrderLine
3 WHERE   ProductID = 'G5698';

```

	Least Expensive Selling Price for Product G5698
1	1.22

4.

```

1 SELECT CAST(SUM(QtyOrdered * Price) AS DECIMAL(10,2)) 'Total Order Price for September'
2 FROM    PurchaseOrderLine
3 WHERE   YEAR(DateNeeded) = YEAR(GETDATE())
4         AND MONTH(DateNeeded) = '9';

```

	Total Order Price for September
1	4195.15

5.

```
1 SELECT ProductID 'Product Number',
2 Description 'Product Description',
3 EOQ 'Economic Order Quantity',
4 QOH 'Quantity on Hand',
5 QOH - EOQ 'Difference',
6 CASE
7     WHEN QOH - EOQ >= -50
8     THEN 'Null'
9     WHEN QOH - EOQ < -50
10    THEN 'Order Now'
11 End 'Order Message'
12 FROM Product
13 WHERE QOH - EOQ < 0
14 ORDER BY ProductID;
15
```

	Product Number	Product Description	Economic Order Quantity	Quantity on Hand	Difference	Order Message
1	A7879	Canvas, Non-Woven	2000.00	1200.00	-800.00	Order Now
2	C2399	Thermoplastic	10.00	5.00	-5.00	Null
3	C9100	Unbleached Muslin	8000.00	5500.00	-2500.00	Order Now
4	G0983	Alpine Small Pot	100.00	65.00	-35.00	Null
5	L8500	Hiking Lounge Seating - Blue	15.00	1.00	-14.00	Null
6	L8501	Hiking Lounge Seating - Gray	10.00	0.00	-10.00	Null
7	O1957	Poly pro tubing, 1/2"	300.00	95.00	-205.00	Order Now
8	P5678	Stuff Sacks - Pillow Size	48.00	40.00	-8.00	Null
9	P7844	Down Baffle Liner	50.00	45.00	-5.00	Null
10	R5660	Water Filtration Pump	30.00	25.00	-5.00	Null
11	T0460	Alpine Water Bottle	100.00	15.00	-85.00	Order Now

6.

```

1 SELECT ProductID 'Product Number',
2 Description 'Product Description',
3 EOQ 'Economic Order Quantity',
4 QOH 'Quantity on Hand',
5 QOH - EOQ 'Difference',
6 CASE
7     WHEN QOH = 0
8     THEN 'Order Immediately'
9     WHEN QOH - EOQ < -35
10    THEN 'Order This Week'
11    WHEN QOH - EOQ BETWEEN -35 AND -11
12    THEN 'Order Next Week'
13    WHEN QOH - EOQ BETWEEN -10 AND -6
14    THEN 'Order Next Month'
15    WHEN QOH - EOQ BETWEEN -1 AND -5
16    THEN 'No Message'
17    End 'Order Message'
18 FROM Product
19 WHERE QOH - EOQ < 0
20 ORDER BY EOQ DESC;

```

	Product Number	Product Description	Economic Order Quantity	Quantity on Hand	Difference	Order Message
1	C9100	Unbleached Muslin	8000.00	5500.00	-2500.00	Order This Week
2	A7879	Canvas, Non-Woven	2000.00	1200.00	-800.00	Order This Week
3	O1957	Poly pro tubing, 1/2"	300.00	95.00	-205.00	Order This Week
4	G0983	Alpine Small Pot	100.00	65.00	-35.00	Order Next Week
5	T0460	Alpine Water Bottle	100.00	15.00	-85.00	Order This Week
6	P7844	Down Baffle Liner	50.00	45.00	-5.00	NULL
7	P5678	Stuff Sacks - Pillow Size	48.00	40.00	-8.00	Order Next Month
8	R5660	Water Filtration Pump	30.00	25.00	-5.00	NULL
9	L8500	Hiking Lounge Seating - Blue	15.00	1.00	-14.00	Order Next Week
10	L8501	Hiking Lounge Seating - Gray	10.00	0.00	-10.00	Order Immediately
11	C2399	Thermoplastic	10.00	5.00	-5.00	NULL

7.

```

1 SELECT ProductTypeID 'Product Type ID',
2 COUNT(*) 'Count of Products',
3 CAST(SUM(QOH) AS int) 'Total Quantity on Hand',
4 CAST(AVG(QOH) AS decimal(10,2))
5 FROM Product
6 GROUP BY ProductTypeID
7 ORDER BY ProductTypeID;
8

```

	Product Type ID	Count of Products	Total Quantity on Hand	(No column name)
1	CC	2	40	20.00
2	CS	3	6705	2235.00
3	HT	1	65	65.00
4	LA	2	1	0.50
5	MS	5	2540	508.00
6	PG	1	40	40.00
7	UT	3	201	67.00

8.

```

1 SELECT ProductTypeID 'Product Type ID',
2         COUNT(*)      'Count of Products',
3         CAST(SUM(QOH) AS int) 'Total Quantity on Hand',
4         CASE
5             WHEN AVG(QOH) > 50
6                 THEN CAST(AVG(QOH) AS decimal(10,2))
7             END         'Average Quantity on Hand'
8 FROM Product
9 GROUP BY ProductTypeID
10 HAVING AVG(QOH) > 50
11 ORDER BY ProductTypeID;

```

	Product Type ID	Count of Products	Total Quantity on Hand	Average Quantity on Hand
1	CS	3	6705	2235.00
2	HT	1	65	65.00
3	MS	5	2540	508.00
4	UT	3	201	67.00

9.

```

1 SELECT ProductID 'Product Number',
2         CONVERT(varchar, MAX(DatePurchased), 101) 'Last Date Purchased',
3         COUNT(QTY) 'Number of Times Purchased',
4         CAST(MIN(Price) AS decimal(4, 2)) 'Minimum Purchase Price',
5         CAST(MAX(Price) AS decimal(4, 2)) 'Maximum Purchase Price',
6         MAX(Price) - (MIN(Price)) 'Difference Between Maximum and Minimum Price'
7 FROM PurchaseHistory
8 GROUP BY ProductID;

```

	Product Number	Last Date Purchased	Number of Times Purchased	Minimum Purchase Price	Maximum Purchase Price	Difference Between Maximum and Minimum Price
1	A7879	03/15/2017	4	0.07	0.12	0.05
2	C2399	08/12/2017	8	1.45	1.99	0.54
3	G0983	03/12/2017	6	1.99	2.38	0.39
4	G1258	07/21/2017	2	4.29	4.29	0.00
5	G1366	06/20/2017	1	4.81	4.81	0.00
6	G5698	06/20/2017	2	2.16	2.21	0.05
7	L8500	12/12/2016	3	26.22	38.40	12.18
8	L8501	12/12/2016	1	29.94	29.94	0.00
9	M3577	07/12/2017	8	4.85	6.35	1.50
10	O1957	07/23/2017	7	0.41	0.65	0.24
11	P5678	06/12/2017	1	23.51	23.51	0.00
12	P7844	07/12/2017	1	0.67	0.67	0.00
13	R5660	06/18/2017	3	2.10	2.15	0.05
14	T0460	02/19/2017	3	1.12	1.98	0.86

10.

```

1 SELECT      ProductID      'Product Number',
2             CONVERT(varchar, MAX(DatePurchased), 101) 'Last Date Purchased',
3             COUNT(QTY)    'Number of Times Purchased',
4             CAST(MIN(Price) AS decimal(4, 2))         'Minimum Purchase Price',
5             CAST(MAX(Price) AS decimal(4, 2))         'Maximum Purchase Price',
6             MAX(Price) - MIN(Price)                   'Difference Between Maximum and Minimum Price'
7 FROM        PurchaseHistory
8 GROUP BY    ProductID
9 HAVING      MAX(Price) - MIN(Price) = 0;
10

```

	Product Number	Last Date Purchased	Number of Times Purchased	Minimum Purchase Price	Maximum Purchase Price	Difference Between Maximum and Minimum Price
1	G1258	07/21/2017	2	4.29	4.29	0.00
2	G1366	06/20/2017	1	4.81	4.81	0.00
3	L8501	12/12/2016	1	29.94	29.94	0.00
4	P5678	06/12/2017	1	23.51	23.51	0.00
5	P7844	07/12/2017	1	0.67	0.67	0.00

11.

```

1 SELECT PONumber 'Purchase Order Number',
2 ProductID 'Product Number',
3 CONVERT(varchar, DateNeeded, 107) 'Date Needed',
4 COUNT(ReceiverID) 'Number of Receivers',
5 CAST(SUM(QtyReceived) AS int) 'Total Quantity Received'
6 FROM Receiver
7 GROUP BY PONumber,
8 ProductID,
9 DateNeeded
10 ORDER BY PONumber,
11 ProductID,
12 DateNeeded;

```

	Purchase Order Number	Product Number	Date Needed	Number of Receivers	Total Quantity Received
1	025974	M3577	Aug 18, 2017	3	600
2	025974	O1957	Aug 18, 2017	2	310
3	045687	C2399	Sep 05, 2017	2	51
4	045687	O1957	Sep 12, 2017	2	440
5	112233	M3577	Oct 07, 2017	2	640
6	112233	P7844	Sep 24, 2017	1	475
7	234607	C2399	Sep 06, 2017	3	75
8	234607	G0983	Sep 08, 2017	1	200
9	234607	G1366	Sep 10, 2017	3	182
10	234607	G5698	Sep 19, 2017	1	182
11	234607	R5660	Sep 26, 2017	2	100
12	234607	T0460	Sep 26, 2017	1	200
13	256887	C2399	Oct 15, 2017	1	20
14	256887	P5678	Oct 15, 2017	2	49
15	543791	G0983	Sep 17, 2017	2	100
16	543791	G0983	Sep 28, 2017	1	20
17	543791	G0983	Oct 02, 2017	1	20
18	543791	G0983	Oct 12, 2017	2	25
19	543791	G5698	Oct 15, 2017	1	12
20	543791	T0460	Oct 12, 2017	3	120
21	600124	G0983	Oct 18, 2017	2	110
22	600124	G1366	Oct 18, 2017	1	150
23	600124	G5698	Oct 18, 2017	3	100
24	902347	G0983	Oct 15, 2017	3	100
25	902347	T0460	Sep 22, 2017	2	100
26	902347	T0460	Dec 05, 2017	1	100

12.

```

1 SELECT      CONVERT(varchar, PODateNeeded, 107)      'Date Needed',
2             CONVERT(varchar, GETDATE(), 107)         'Today's Date',
3             DATEDIFF(day, PODateNeeded, GETDATE())    'Days Overdue',
4             PONumber                                  'Purchase Order Number',
5             CONVERT(varchar, PODatePlaced, 107)       'Date Ordered',
6             BuyerEmpID                                'Buyer',
7             VendorID
8 FROM        PurchaseOrder
9 WHERE       DATEDIFF(day, PODateNeeded, GETDATE()) > 7
10 ORDER BY   PODateNeeded;

```

	Date Needed	Today's Date	Days Overdue	Purchase Order Number	Date Ordered	Buyer	VendorID
1	Aug 15, 2017	Oct 19, 2017	65	056489	Aug 04, 2017	E10055	36257
2	Aug 18, 2017	Oct 19, 2017	62	025974	Aug 15, 2017	E10015	18567
3	Sep 12, 2017	Oct 19, 2017	37	045687	Aug 21, 2017	E10055	00216
4	Sep 28, 2017	Oct 19, 2017	21	234607	Sep 04, 2017	E10055	17453

13.

```

1 SELECT      CONCAT(EmpLastName, ', ', SUBSTRING(EmpFirstName,1, 1) + '.') 'Employee Name',
2             '(' + Substring(EmpPhone, 1, 3) + ')'
3             + Substring(EmpPhone, 4, 3) + '-'
4             + Substring(EmpPhone, 7, 4)                                'Employee Phone Number',
5             EmpMgrID                                                    'Employee Manager ID'
6 FROM        Employee
7 WHERE       EmpEmail IS NULL
8 ORDER BY   EmpFirstName;

```

	Employee Name	Employee Phone Number	Employee Manager ID
1	Alberghetti, A.	(775) 621-9005	NULL
2	Chen, J.	(775) 905-3821	E10015
3	Hernandez, N.	(775) 531-3562	E10003

14.

```

1 SELECT      VendorID      'Vendor Number',
2             Name          'Vendor Name',
3             Zip           'Vendor Zip Code',
4             CONVERT(varchar, FirstBuyDate, 107) 'Date First Purchased'
5 FROM        Vendor
6 WHERE       FirstBuyDate = (SELECT MIN(FirstBuyDate)
7                               FROM    Vendor);

```

	Vendor Number	Vendor Name	Vendor Zip Code	Date First Purchased
1	17453	Albemarle Corporation	89431	Jun 14, 1998

15.

```
1 SELECT VendorID,  
2        Name,  
3        Zip,  
4        CONVERT(varchar, FirstBuyDate, 107) 'Date First Purchased'  
5 FROM Vendor  
6 WHERE VendorID not in (Select VendorID  
7                        FROM PurchaseOrder);
```

	VendorID	Name	Zip	Date First Purchased
1	13135	Adventure Materials	84560-2700	Aug 04, 2016
2	20566	BestCo Food Equipment	15003	Sep 14, 2017
3	22890	Kitchen Chemicals Corp.	89431-5602	Jul 23, 2013