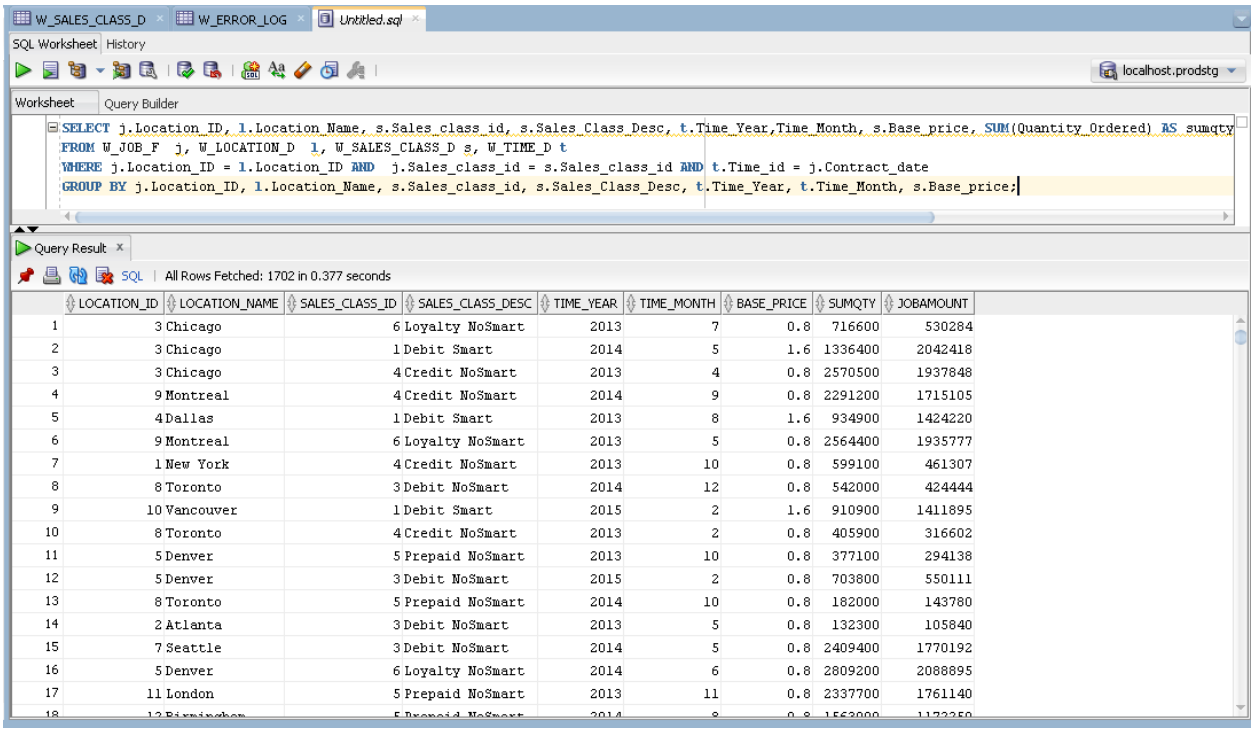
Base Queries

1. BQ1

SELECT j.Location_ID, l.Location_Name, s.Sales_class_id, s.Sales_Class_Desc, t.Time_Year,Time_Month, s.Base_price, SUM(Quantity_Ordered) AS sumqty, SUM(Quantity_Ordered*Unit_Price) AS jobAmount
FROM W_JOB_F j, W_LOCATION_D l, W_SALES_CLASS_D s, W_TIME_D t
WHERE j.Location_ID = l.Location_ID AND j.Sales_class_id = s.Sales_class_id AND t.Time_id = j.Contract_date
GROUP BY j.Location_ID, l.Location_Name, s.Sales_class_id, s.Sales_Class_Desc, t.Time_Year, t.Time_Month, s.Base_price;

Result:



	LOCATION_ID	LOCATION_NAME	SALES_CLASS_ID	SALES_CLASS_DESC	TIME_YEAR	TIME_MONTH	BASE_PRICE	SUMQTY	JOBAMOUNT
1	3	Chicago	6	Loyalty NoSmart	2013	7	0.8	716600	530284
2	3	Chicago	1	Debit Smart	2014	5	1.6	1336400	2042418
3	3	Chicago	4	Credit NoSmart	2013	4	0.8	2570500	1937848
4	9	Montreal	4	Credit NoSmart	2014	9	0.8	2291200	1715105
5	4	Dallas	1	Debit Smart	2013	8	1.6	934900	1424220
6	9	Montreal	6	Loyalty NoSmart	2013	5	0.8	2564400	1935777
7	1	New York	4	Credit NoSmart	2013	10	0.8	599100	461307
8	8	Toronto	3	Debit NoSmart	2014	12	0.8	542000	424444
9	10	Vancouver	1	Debit Smart	2015	2	1.6	910900	1411895
10	8	Toronto	4	Credit NoSmart	2013	2	0.8	405900	316602
11	5	Denver	5	Prepaid NoSmart	2013	10	0.8	377100	294138
12	5	Denver	3	Debit NoSmart	2015	2	0.8	703800	550111
13	8	Toronto	5	Prepaid NoSmart	2014	10	0.8	182000	143780
14	2	Atlanta	3	Debit NoSmart	2013	5	0.8	132300	105840
15	7	Seattle	3	Debit NoSmart	2014	5	0.8	2409400	1770192
16	5	Denver	6	Loyalty NoSmart	2014	6	0.8	2809200	2088895
17	11	London	5	Prepaid NoSmart	2013	11	0.8	2337700	1761140

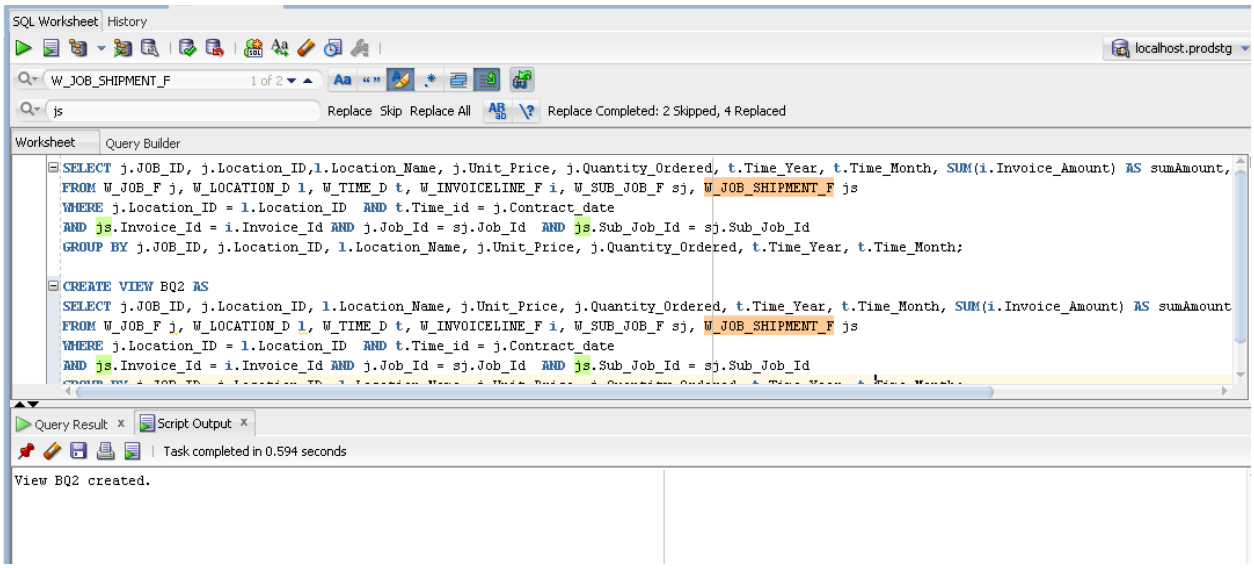
2. BQ2

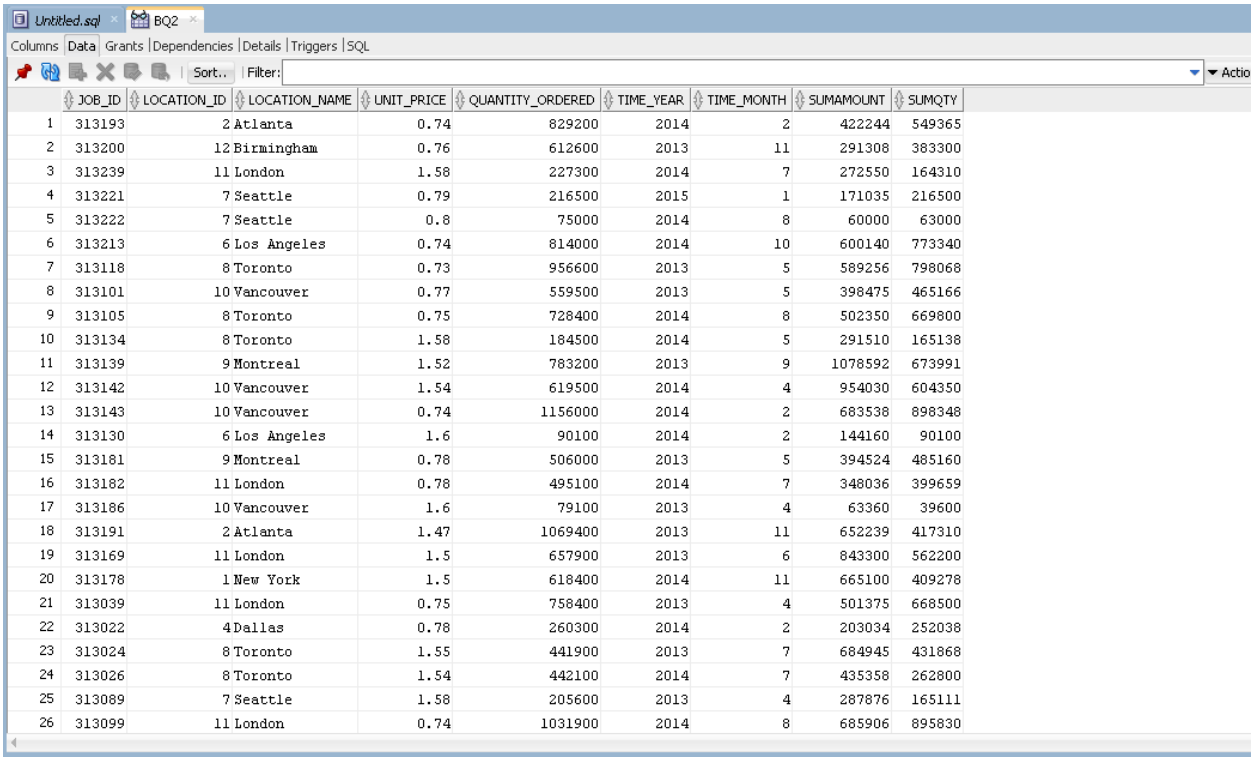
SELECT j.JOB_ID, j.Location_ID,l.Location_Name, j.Unit_Price, j.Quantity_Ordered, t.Time_Year, t.Time_Month, SUM(i.Invoice_Amount) AS sumAmount, SUM(i.Invoice_Quantity) AS sumQty
FROM W_JOB_F j, W_LOCATION_D l, W_TIME_D t, W_INVOICELINE_F i, W_SUB_JOB_F sj, W_JOB_SHIPMENT_F js
WHERE j.Location_ID = l.Location_ID AND t.Time_id = j.Contract_date

```
AND js.Invoice_Id = i.Invoice_Id AND j.Job_Id = sj.Job_Id  AND js.Sub_Job_Id =
sj.Sub_Job_Id
GROUP BY j.JOB_ID, j.Location_ID, l.Location_Name, j.Unit_Price, j.Quantity_Ordered,
t.Time_Year, t.Time_Month;

CREATE VIEW BQ2 AS
SELECT j.JOB_ID, j.Location_ID, l.Location_Name, j.Unit_Price, j.Quantity_Ordered,
t.Time_Year, t.Time_Month, SUM(i.Invoice_Amount) AS sumAmount,
SUM(i.Invoice_Quantity) AS sumQty
FROM W_JOB_F j, W_LOCATION_D l, W_TIME_D t, W_INVOICELINE_F i, W_SUB_JOB_F
sj, W_JOB_SHIPMENT_F js
WHERE j.Location_ID = l.Location_ID  AND t.Time_id = j.Contract_date
AND js.Invoice_Id = i.Invoice_Id AND j.Job_Id = sj.Job_Id  AND js.Sub_Job_Id =
sj.Sub_Job_Id
GROUP BY j.JOB_ID, j.Location_ID, l.Location_Name, j.Unit_Price, j.Quantity_Ordered,
t.Time_Year, t.Time_Month
```

Result:





Untitled.sql | BQ2

Columns | Data | Grants | Dependencies | Details | Triggers | SQL

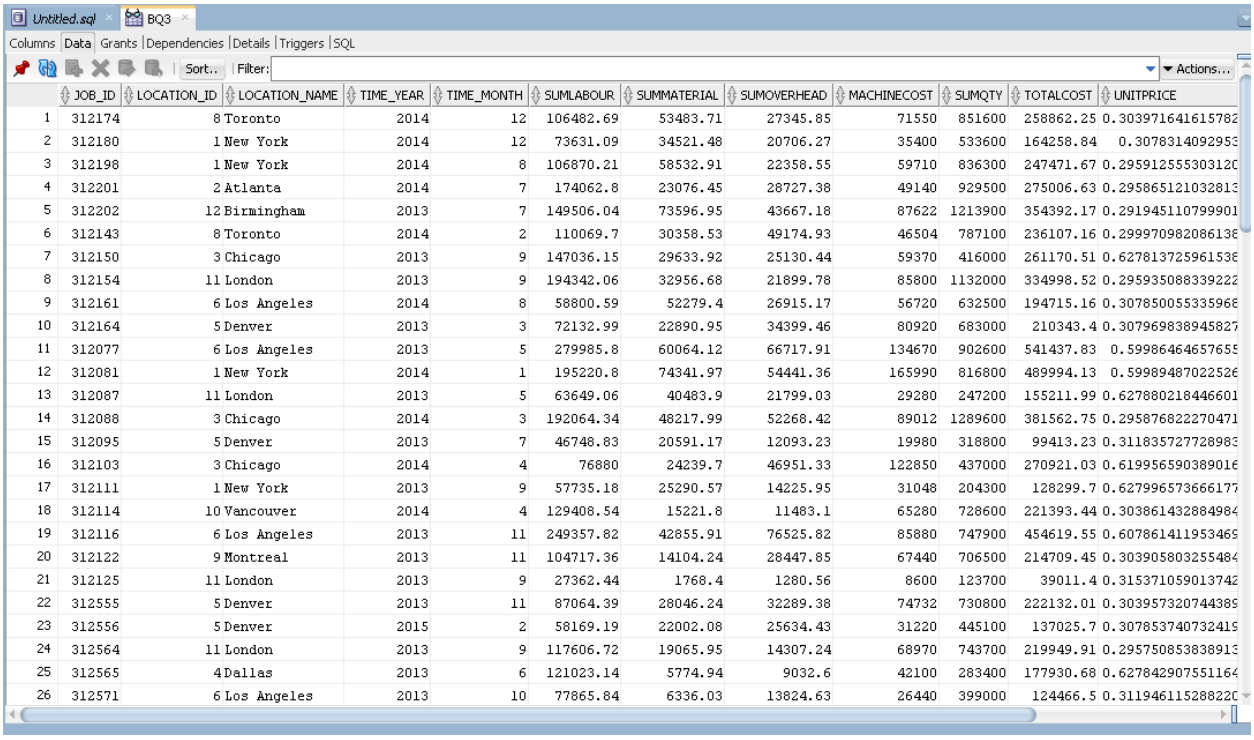
Sort.. | Filter:

	JOB_ID	LOCATION_ID	LOCATION_NAME	UNIT_PRICE	QUANTITY_ORDERED	TIME_YEAR	TIME_MONTH	SUMAMOUNT	SUMQTY
1	313193	2	Atlanta	0.74	829200	2014	2	422244	549365
2	313200	12	Birmingham	0.76	612600	2013	11	291308	383300
3	313239	11	London	1.58	227300	2014	7	272550	164310
4	313221	7	Seattle	0.79	216500	2015	1	171035	216500
5	313222	7	Seattle	0.8	75000	2014	8	60000	63000
6	313213	6	Los Angeles	0.74	814000	2014	10	600140	773340
7	313118	8	Toronto	0.73	956600	2013	5	589256	798068
8	313101	10	Vancouver	0.77	559500	2013	5	398475	465166
9	313105	8	Toronto	0.75	728400	2014	8	502350	669800
10	313134	8	Toronto	1.58	184500	2014	5	291510	165138
11	313139	9	Montreal	1.52	783200	2013	9	1078592	673991
12	313142	10	Vancouver	1.54	619500	2014	4	954030	604350
13	313143	10	Vancouver	0.74	1156000	2014	2	683538	898348
14	313130	6	Los Angeles	1.6	90100	2014	2	144160	90100
15	313181	9	Montreal	0.78	506000	2013	5	394524	485160
16	313182	11	London	0.78	495100	2014	7	348036	399659
17	313186	10	Vancouver	1.6	79100	2013	4	63360	39600
18	313191	2	Atlanta	1.47	1069400	2013	11	652239	417310
19	313169	11	London	1.5	657900	2013	6	843300	562200
20	313178	1	New York	1.5	618400	2014	11	665100	409278
21	313039	11	London	0.75	758400	2013	4	501375	668500
22	313022	4	Dallas	0.78	260300	2014	2	203034	252038
23	313024	8	Toronto	1.55	441900	2013	7	684945	431868
24	313026	8	Toronto	1.54	442100	2014	7	435358	262800
25	313089	7	Seattle	1.58	205600	2013	4	287876	165111
26	313099	11	London	0.74	1031900	2014	8	685906	895830

3. BQ3

```
CREATE VIEW BQ3 AS
SELECT JOB_ID, Location_ID, Location_Name, Time_Year, Time_Month, sumLabour,
sumMaterial, sumOverhead, machineCost, sumQty, totalCost, totalCost/sumQty AS
unitPrice
FROM (
    SELECT sj.JOB_ID, sj.Location_ID, l.Location_Name, t.Time_Year, t.Time_Month,
SUM(sj.Cost_Labor) AS sumLabour, SUM(sj.Cost_Material) AS sumMaterial,
SUM(sj.Cost_Overhead) AS sumOverhead, SUM(sj.Machine_Hours*m.Rate_per_hour) AS
machineCost, SUM(sj.Quantity_produced) AS sumQty,
    SUM(sj.Cost_Labor+ sj.Cost_Material+ sj.Cost_Overhead+
(sj.Machine_Hours*m.Rate_per_hour)) AS totalCost
    FROM W_SUB_JOB_F sj, W_JOB_F j,W_TIME_D t,W_LOCATION_D
l,W_MACHINE_TYPE_D m
    WHERE sj.Job_id = j.Job_id  AND l.location_id = sj.Location_id AND t.Time_id =
j.Contract_Date AND
    sj.Machine_Type_id = m.Machine_Type_ID
    GROUP BY sj.JOB_ID, sj.Location_ID, l.Location_Name, t.Time_Year, t.Time_Month);
```

Result:



Untitled.sql | BQ3

Columns | Data | Grants | Dependencies | Details | Triggers | SQL

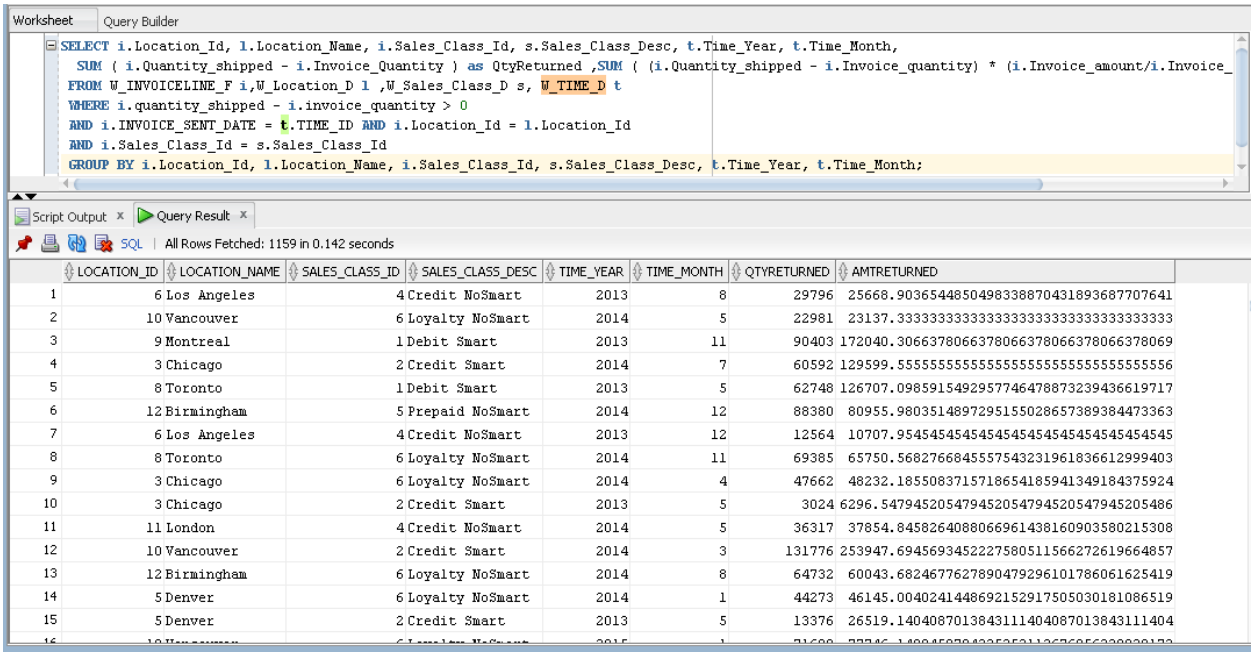
Sort.. | Filter: | Actions...

	JOB_ID	LOCATION_ID	LOCATION_NAME	TIME_YEAR	TIME_MONTH	SUMLABOUR	SUMMATERIAL	SUMOVERHEAD	MACHINECOST	SUMQTY	TOTALCOST	UNITPRICE
1	312174	8	Toronto	2014	12	106482.69	53483.71	27345.85	71550	851600	258862.25	0.303971641615782
2	312180	1	New York	2014	12	73631.09	34521.48	20706.27	35400	533600	164258.84	0.3078314092953
3	312198	1	New York	2014	8	106870.21	58532.91	22358.55	59710	836300	247471.67	0.295912555303120
4	312201	2	Atlanta	2014	7	174062.8	23076.45	28727.38	49140	929500	275006.63	0.295865121032813
5	312202	12	Birmingham	2013	7	149506.04	73596.95	43667.18	87622	1213900	354392.17	0.291945110799901
6	312143	8	Toronto	2014	2	110069.7	30358.53	49174.93	46504	787100	236107.16	0.299970982086138
7	312150	3	Chicago	2013	9	147036.15	29633.92	25130.44	59370	416000	261170.51	0.627813725961538
8	312154	11	London	2013	9	194342.06	32956.68	21899.78	85800	1132000	334998.52	0.295935088339222
9	312161	6	Los Angeles	2014	8	58800.59	52279.4	26915.17	56720	632500	194715.16	0.307850055335968
10	312164	5	Denver	2013	3	72132.99	22890.95	34399.46	80920	683000	210343.4	0.307969838945827
11	312077	6	Los Angeles	2013	5	279985.8	60064.12	66717.91	134670	902600	541437.83	0.59986464657655
12	312081	1	New York	2014	1	195220.8	74341.97	54441.36	165990	816800	489994.13	0.59989487022526
13	312087	11	London	2013	5	63649.06	40483.9	21799.03	29280	247200	155211.99	0.627880218446601
14	312088	3	Chicago	2014	3	192064.34	48217.99	52268.42	89012	1289600	381562.75	0.295876822270471
15	312095	5	Denver	2013	7	46748.83	20591.17	12093.23	19980	318800	99413.23	0.311835727728983
16	312103	3	Chicago	2014	4	76880	24239.7	46951.33	122850	437000	270921.03	0.619956590389016
17	312111	1	New York	2013	9	57735.18	25290.57	14225.95	31048	204300	128299.7	0.627996573666177
18	312114	10	Vancouver	2014	4	129408.54	15221.8	11483.1	65280	728600	221393.44	0.303861432884984
19	312116	6	Los Angeles	2013	11	249357.82	42855.91	76525.82	85880	747900	454619.55	0.607861411953469
20	312122	9	Montreal	2013	11	104717.36	14104.24	28447.85	67440	706500	214709.45	0.303905803255484
21	312125	11	London	2013	9	27362.44	1768.4	1280.56	8600	123700	39011.4	0.315371059013742
22	312555	5	Denver	2013	11	87064.39	28046.24	32289.38	74732	730800	222132.01	0.303957320744389
23	312556	5	Denver	2015	2	58169.19	22002.08	25634.43	31220	445100	137025.7	0.307853740732419
24	312564	11	London	2013	9	117606.72	19065.95	14307.24	68970	743700	219949.91	0.295750853838913
25	312565	4	Dallas	2013	6	121023.14	5774.94	9032.6	42100	283400	177930.68	0.627842907551164
26	312571	6	Los Angeles	2013	10	77865.84	6336.03	13824.63	26440	399000	124466.5	0.311946115288220

4. BQ4

```
SELECT W_InvoiceLine_F.Location_Id, Location_Name,W_InvoiceLine_F.Sales_Class_Id,
Sales_Class_Desc,Time_Year, Time_Month,
  SUM ( Quantity_shipped - Invoice_Quantity ) as QTYRETURNED,SUM (
(Quantity_shipped - Invoice_quantity) * (Invoice_amount/Invoice_quantity) ) AS
SUMAMTRETURNED
 FROM W_INVOICELINE_F,W_Location_D ,W_Sales_Class_D,W_TIME_D
 WHERE quantity_shipped - invoice_quantity > 0
 AND W_INVOICELINE_F.INVOICE_SENT_DATE = W_TIME_D.TIME_ID AND
W_INVOICELINE_F.Location_Id = W_Location_D.Location_Id
 AND W_INVOICELINE_F.Sales_Class_Id = W_Sales_Class_D.Sales_Class_Id
 GROUP BY W_InvoiceLine_F.Location_Id,
Location_Name,W_InvoiceLine_F.Sales_Class_Id, Sales_Class_Desc,Time_Year,
Time_Month;
```

Result:



5. BQ5

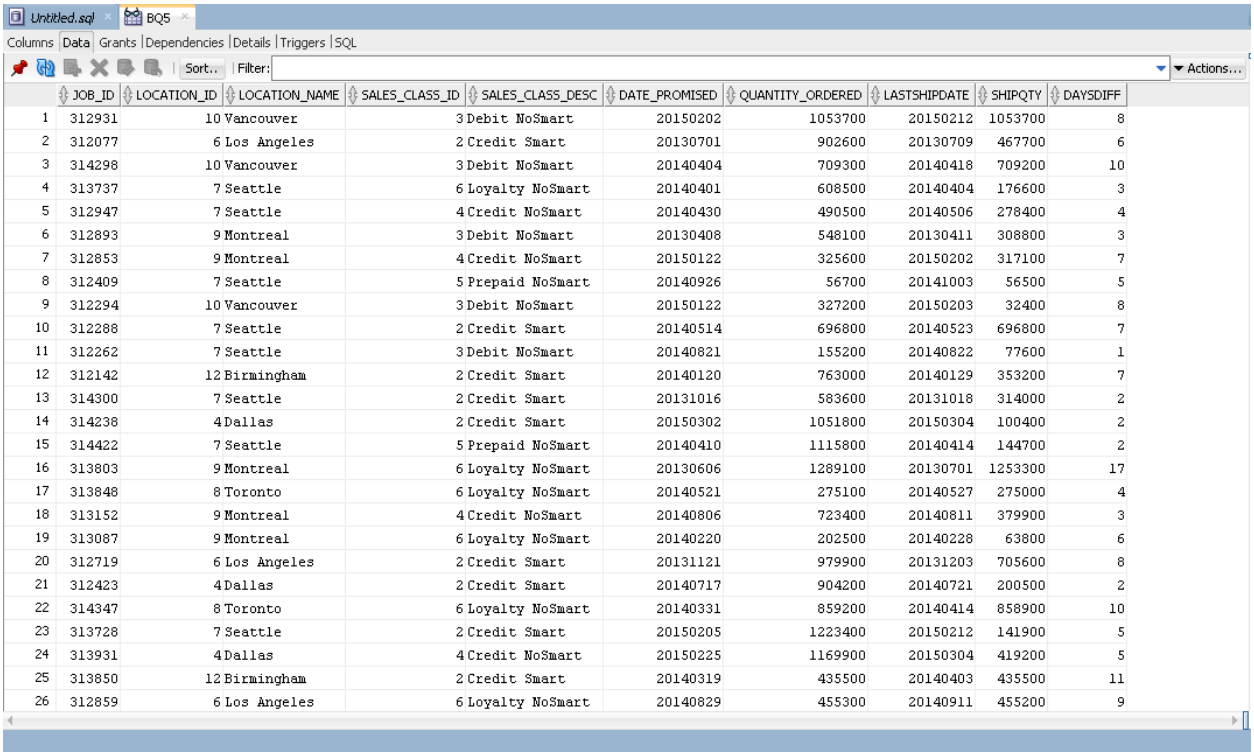
```
SELECT
Job_id,Location_ID,Location_Name,Sales_class_id,sales_class_desc,Date_Promised,Quan
tity_Ordered,LastShipDate,ShipQty,getBusDaysDiff(LastShipDate,Date_Promised) AS
DaysDiff
FROM
  (
    SELECT j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id, s.sales_class_desc,
    j.Date_Promised, j.Quantity_Ordered, MAX(js.Actual_Ship_Date) AS LastShipDate,
SUM(js.Actual_Quantity) AS ShipQty
    FROM W_JOB_F j, W_LOCATION_D l, W_SALES_CLASS_D s, W_SUB_JOB_F sj,
W_JOB_SHIPMENT_F js
    WHERE js.Actual_Ship_Date > j.Date_Promised
    AND j.Location_id =  l.Location_id AND j.Sales_Class_Id = s.Sales_Class_Id
    AND sj.SUB_JOB_ID = js.SUB_JOB_ID AND j.Job_Id = sj.JOB_ID
    GROUP BY j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id,
s.sales_class_desc,
    j.Date_Promised, j.Quantity_Ordered
  ) X1
WHERE LastShipDate > Date_Promised;
```

```
CREATE VIEW BQ5 AS
SELECT
Job_id,Location_ID,Location_Name,Sales_class_id,sales_class_desc,
Date_Promised,Quantity_Ordered,LastShipDate,ShipQty,
getBusDaysDiff(LastShipDate,Date_Promised) AS DaysDiff
FROM
   (
      SELECT j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id, s.sales_class_desc,
      j.Date_Promised, j.Quantity_Ordered, MAX(js.Actual_Ship_Date) AS LastShipDate,
SUM(js.Actual_Quantity) AS ShipQty
      FROM W_JOB_F j,W_LOCATION_D l,W_SALES_CLASS_D s, W_SUB_JOB_F
sj,W_JOB_SHIPMENT_F js
      WHERE js.Actual_Ship_Date > j.Date_Promised
      AND j.Location_id =  l.Location_id AND j.Sales_Class_Id = s.Sales_Class_Id
      AND sj.SUB_JOB_ID = js.SUB_JOB_ID AND j.Job_Id = sj.JOB_ID
      GROUP BY j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id,
s.sales_class_desc,
      j.Date_Promised, j.Quantity_Ordered
   ) X1
WHERE LastShipDate > Date_Promised;

CREATE VIEW BQ5 AS
SELECT
Job_id,Location_ID,Location_Name,Sales_class_id,sales_class_desc,
Date_Promised,Quantity_Ordered,LastShipDate,SUMSHIPQTY,
getBusDaysDiff(LastShipDate,Date_Promised) AS DaysDiff
FROM
(
SELECT
W_JOB_F.Job_id,W_JOB_F.Location_ID,Location_Name,W_JOB_F.Sales_class_id,sales_cl
ass_desc,
Date_Promised,Quantity_Ordered,MAX(Actual_Ship_Date) AS
LastShipDate,SUM(Actual_Quantity) AS SUMSHIPQTY
FROM
W_JOB_F,W_LOCATION_D,W_SALES_CLASS_D,W_SUB_JOB_F,W_JOB_SHIPMENT_F
WHERE Actual_Ship_Date > Date_Promised
AND W_JOB_F.Location_id =  W_LOCATION_D.Location_id AND W_Job_F.Sales_Class_Id
= W_Sales_Class_D.Sales_Class_Id
AND W_SUB_JOB_F.SUB_JOB_ID = W_JOB_SHIPMENT_F.SUB_JOB_ID AND
W_Job_F.Job_Id = W_SUB_JOB_F.JOB_ID
```

GROUP BY
W_JOB_F.Job_id,W_JOB_F.Location_ID,Location_Name,W_JOB_F.Sales_class_id,sales_class_desc,
Date_Promised,Quantity_Ordered
)
WHERE LastShipDate > Date_Promised;

Result:



Untitled.sql | BQ5

Columns | Data | Grants | Dependencies | Details | Triggers | SQL

Sort.. | Filter: | Actions...

	JOB_ID	LOCATION_ID	LOCATION_NAME	SALES_CLASS_ID	SALES_CLASS_DESC	DATE_PROMISED	QUANTITY_ORDERED	LASTSHIPDATE	SHIPQTY	DAYSDIFF
1	312931	10	Vancouver	3	Debit NoSmart	20150202	1053700	20150212	1053700	8
2	312077	6	Los Angeles	2	Credit Smart	20130701	902600	20130709	467700	6
3	314298	10	Vancouver	3	Debit NoSmart	20140404	709300	20140418	709200	10
4	313737	7	Seattle	6	Loyalty NoSmart	20140401	608500	20140404	176600	3
5	312947	7	Seattle	4	Credit NoSmart	20140430	490500	20140506	278400	4
6	312893	9	Montreal	3	Debit NoSmart	20130408	548100	20130411	308800	3
7	312853	9	Montreal	4	Credit NoSmart	20150122	325600	20150202	317100	7
8	312409	7	Seattle	5	Prepaid NoSmart	20140926	56700	20141003	56500	5
9	312294	10	Vancouver	3	Debit NoSmart	20150122	327200	20150203	32400	8
10	312288	7	Seattle	2	Credit Smart	20140514	696800	20140523	696800	7
11	312262	7	Seattle	3	Debit NoSmart	20140821	155200	20140822	77600	1
12	312142	12	Birmingham	2	Credit Smart	20140120	763000	20140129	353200	7
13	314300	7	Seattle	2	Credit Smart	20131016	583600	20131018	314000	2
14	314238	4	Dallas	2	Credit Smart	20150302	1051800	20150304	100400	2
15	314422	7	Seattle	5	Prepaid NoSmart	20140410	1115800	20140414	144700	2
16	313803	9	Montreal	6	Loyalty NoSmart	20130606	1289100	20130701	1253300	17
17	313848	8	Toronto	6	Loyalty NoSmart	20140521	275100	20140527	275000	4
18	313152	9	Montreal	4	Credit NoSmart	20140806	723400	20140811	379900	3
19	313087	9	Montreal	6	Loyalty NoSmart	20140220	202500	20140228	63800	6
20	312719	6	Los Angeles	2	Credit Smart	20131121	979900	20131203	705600	8
21	312423	4	Dallas	2	Credit Smart	20140717	904200	20140721	200500	2
22	314347	8	Toronto	6	Loyalty NoSmart	20140331	859200	20140414	858900	10
23	313728	7	Seattle	2	Credit Smart	20150205	1223400	20150212	141900	5
24	313931	4	Dallas	4	Credit NoSmart	20150225	1169900	20150304	419200	5
25	313850	12	Birmingham	2	Credit Smart	20140319	435500	20140403	435500	11
26	312859	6	Los Angeles	6	Loyalty NoSmart	20140829	455300	20140911	455200	9

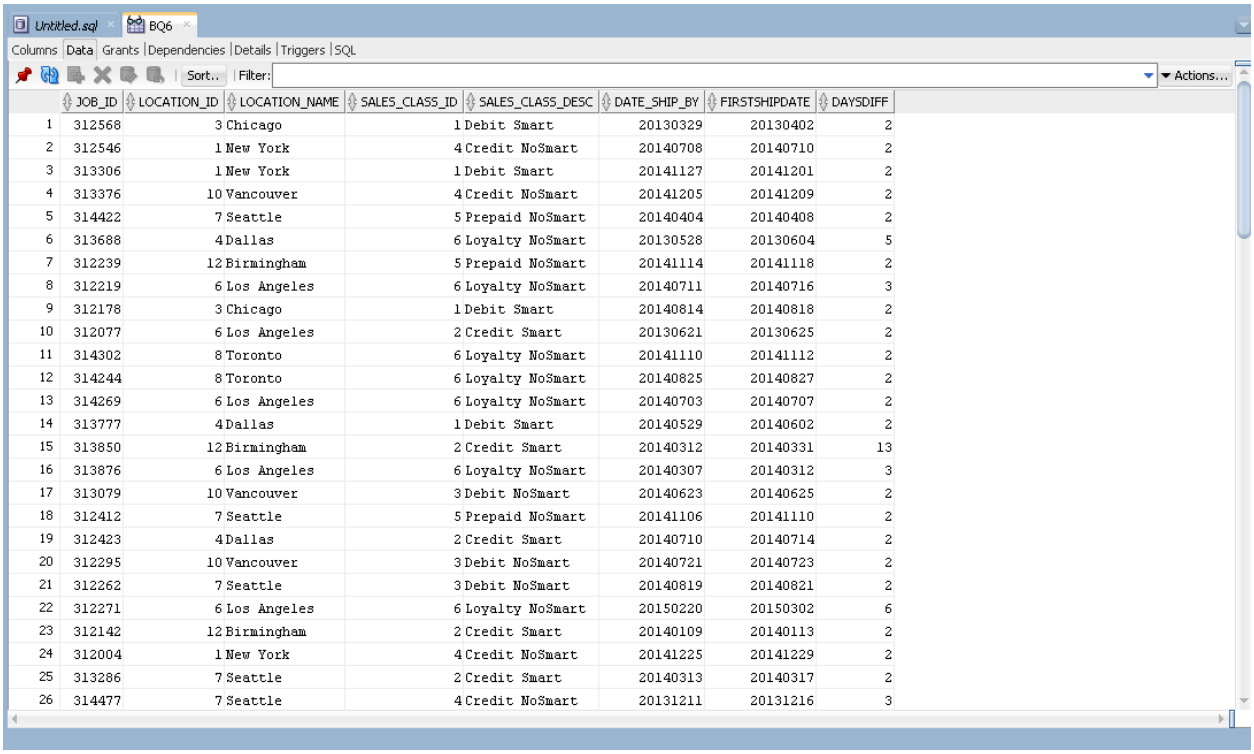
6. BQ6

SELECT
Job_id,Location_ID,Location_Name,Sales_class_id,sales_class_desc,
Date_Ship_By,FirstShipDate,getBusDaysDiff(FirstShipDate,Date_Ship_By) AS DaysDiff
FROM
(
SELECT j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id, s.sales_class_desc,
j.Date_Ship_By, MIN(js.Actual_Ship_Date) AS FirstShipDate
FROM W_JOB_F j ,W_LOCATION_D l,W_SALES_CLASS_D s,W_SUB_JOB_F sj,W_JOB_SHIPMENT_F js
WHERE j.Location_id = l.Location_id AND j.Sales_Class_Id = s.Sales_Class_Id
AND sj.SUB_JOB_ID = js.SUB_JOB_ID AND j.Job_Id = sj.JOB_ID

```
      GROUP BY j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id,
s.sales_class_desc,
      j.Date_Ship_By
   )
WHERE FirstShipDate > Date_Ship_By;


CREATE VIEW BQ6 AS
SELECT
Job_id,Location_ID,Location_Name,Sales_class_id,sales_class_desc,
Date_Ship_By,FirstShipDate,getBusDaysDiff(FirstShipDate,Date_Ship_By) AS DaysDiff
FROM
   (
      SELECT j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id, s.sales_class_desc,
      j.Date_Ship_By, MIN(js.Actual_Ship_Date) AS FirstShipDate
      FROM W_JOB_F j ,W_LOCATION_D l,W_SALES_CLASS_D s,W_SUB_JOB_F
sj,W_JOB_SHIPMENT_F js
      WHERE j.Location_id =  l.Location_id AND j.Sales_Class_Id = s.Sales_Class_Id
      AND sj.SUB_JOB_ID = js.SUB_JOB_ID AND j.Job_Id = sj.JOB_ID
      GROUP BY j.Job_id, j.Location_ID, l.Location_Name, j.Sales_class_id,
s.sales_class_desc,
      j.Date_Ship_By
   )
WHERE FirstShipDate > Date_Ship_By;
```

Result:



	JOB_ID	LOCATION_ID	LOCATION_NAME	SALES_CLASS_ID	SALES_CLASS_DESC	DATE_SHIP_BY	FIRSTSHIPDATE	DAYSDIFF
1	312568	3	Chicago	1	Debit Smart	20130329	20130402	2
2	312546	1	New York	4	Credit NoSmart	20140708	20140710	2
3	313306	1	New York	1	Debit Smart	20141127	20141201	2
4	313376	10	Vancouver	4	Credit NoSmart	20141205	20141209	2
5	314422	7	Seattle	5	Prepaid NoSmart	20140404	20140408	2
6	313688	4	Dallas	6	Loyalty NoSmart	20130528	20130604	5
7	312239	12	Birmingham	5	Prepaid NoSmart	20141114	20141118	2
8	312219	6	Los Angeles	6	Loyalty NoSmart	20140711	20140716	3
9	312178	3	Chicago	1	Debit Smart	20140814	20140818	2
10	312077	6	Los Angeles	2	Credit Smart	20130621	20130625	2
11	314302	8	Toronto	6	Loyalty NoSmart	20141110	20141112	2
12	314244	8	Toronto	6	Loyalty NoSmart	20140825	20140827	2
13	314269	6	Los Angeles	6	Loyalty NoSmart	20140703	20140707	2
14	313777	4	Dallas	1	Debit Smart	20140529	20140602	2
15	313850	12	Birmingham	2	Credit Smart	20140312	20140331	13
16	313876	6	Los Angeles	6	Loyalty NoSmart	20140307	20140312	3
17	313079	10	Vancouver	3	Debit NoSmart	20140623	20140625	2
18	312412	7	Seattle	5	Prepaid NoSmart	20141106	20141110	2
19	312423	4	Dallas	2	Credit Smart	20140710	20140714	2
20	312295	10	Vancouver	3	Debit NoSmart	20140721	20140723	2
21	312262	7	Seattle	3	Debit NoSmart	20140819	20140821	2
22	312271	6	Los Angeles	6	Loyalty NoSmart	20150220	20150302	6
23	312142	12	Birmingham	2	Credit Smart	20140109	20140113	2
24	312004	1	New York	4	Credit NoSmart	20141225	20141229	2
25	313286	7	Seattle	2	Credit Smart	20140313	20140317	2
26	314477	7	Seattle	4	Credit NoSmart	20131211	20131216	3