

# Solution for Problem6 of Module 2 Assignment

Dimension Tables are:

## Customer

<i>CustKey</i>	<i>Cust_Name</i>	<i>E-Mail_Address</i>	<i>City</i>	<i>State</i>	<i>Zip</i>	<i>Country</i>	<i>Credit_Limit</i>	<i>Terms_Code</i>
111111	First Credit	<a href="mailto:sue.good@firstcredit.com">sue.good@firstcredit.com</a>	San Mateo	CA	94404	USA	1000000	CCD
111112	Second Credit	<a href="mailto:bill.smith@secondcredit.com">bill.smith@secondcredit.com</a>	New York	NY	10577	USA	1500000	Net60
111113	Third Credit	<a href="mailto:mary.jones@thirdcredit.com">mary.jones@thirdcredit.com</a>	Toronto	QC	M4E1B4	CA	2000000	Net20
111114	First Bank	<a href="mailto:amy.tangh@firstbank.com">amy.tangh@firstbank.com</a>	St. Louis	MO	63105	USA	1700000	Net30

## CustLocation

<i>Cust_Loc_Key</i>	<i>Cust_Name</i>	<i>Cust_No</i>	<i>E-Mail_Address</i>	<i>City</i>	<i>State</i>	<i>Zip</i>	<i>Country</i>	<i>Cust_Key</i>
1111111	First Credit	<u>1</u>	<a href="mailto:sue.good@firstcredit.com">sue.good@firstcredit.com</a>	San Mateo	CA	94404	USA	111111
1111112	First Credit	<u>2</u>	<a href="mailto:sue.good@firstcredit.com">sue.good@firstcredit.com</a>	San Francisco	CA	94407	USA	111111
1111121	Second Credit	<u>1</u>	<a href="mailto:bill.smith@secondcredit.com">bill.smith@secondcredit.com</a>	New York	NY	10577	USA	111112
1111131	Third Credit	<u>1</u>	<a href="mailto:mary.jones@thirdcredit.com">mary.jones@thirdcredit.com</a>	Toronto	QC	M4E1B4	CA	111113
1111132	Third Credit	<u>2</u>	<a href="mailto:ann.lee@thirdcredit.com">ann.lee@thirdcredit.com</a>	Cincinnati	OH	45236	USA	111113
1111121	First Bank	<u>1</u>	<a href="mailto:amy.tang@firstbank.com">amy.tang@firstbank.com</a>	St. Louis	MO	63105	USA	111114
1111122	First Bank	<u>2</u>	<a href="mailto:joe.slick@firstbank.com">joe.slick@firstbank.com</a>	St. Louis	MO	63107	USA	111114

## SalesAgent

<i>Sales_Agent_Id</i>	<i>Sales_Agent_Name</i>	<i>State</i>	<i>Country</i>
1	Ron Jones	CO	USA
2	Tammy Ralston	BC	CA
3	Theo Jackson	GA	USA

## Machine Type

<i>Machine_ Type_Id</i>	<i>Manufacturer</i>	<i>Model</i>	<i>Rate_Per_Hour</i>	<i>Number_Of _Machines</i>
1	Connex	Connex M1	10	100
2	Remix	Remix M1	15	50
3	Connex	Connex M2	20	10
4	Remix	Remix M2	25	20

## Time

<i>Time_Id</i>	<i>Year</i>	<i>Quarter</i>	<i>Month</i>	<i>Day</i>	<i>Week</i>
20130608	2013	2	6	8	23
20131205	2013	4	12	5	49
20131220	2013	4	12	20	51
20140101	2014	1	1	1	1
20140103	2014	1	1	3	1
20140105	2014	1	1	5	2
20140110	2014	1	1	10	2
20140115	2014	1	1	15	3
20140117	2014	1	1	17	3
20140124	2014	1	1	24	4
20140125	2014	1	1	25	4
20140131	2014	1	1	31	5
20140201	2014	1	2	1	5
20140202	2014	1	2	2	6
20140203	2014	1	2	3	6
20140215	2014	1	2	15	7
20140224	2014	1	2	24	9
20140228	2014	1	2	28	9
20140301	2014	1	3	1	9
20140314	2014	1	3	14	11
20140315	2014	1	3	15	11
20140331	2014	1	3	31	14
20140401	2014	2	4	1	14
20140430	2014	2	4	30	18
20140501	2014	2	5	1	18
20140517	2014	2	5	17	20
20140531	2014	2	5	31	22
20140601	2014	2	6	1	23
20140603	2014	2	6	3	23
20140615	2014	2	6	15	25
20140630	2014	2	6	30	27
20140701	2014	3	7	1	27

20140707	2014	3	7	7	28
20140731	2014	3	7	31	31
20140801	2014	3	8	1	31
20140810	2014	3	8	10	33
20140831	2014	3	8	31	36
20140901	2014	3	9	1	36
20140905	2014	3	9	5	36
20140915	2014	3	9	15	38
20140930	2014	3	9	30	40
20141001	2014	4	10	1	40
20141005	2014	4	10	5	41
20141031	2014	4	10	31	44
20141101	2014	4	11	1	44
20141120	2014	4	11	20	47
20141130	2014	4	11	30	49
20141201	2014	4	12	1	49
20141208	2014	4	12	8	50
20141215	2014	4	12	15	51
20141231	2014	4	12	31	53
20150103	2015	1	1	3	1
20150110	2015	1	1	10	2
20150125	2015	1	1	25	5
20150126	2015	1	1	26	5
20150202	2015	1	2	2	6
20150203	2015	1	2	3	6
20150213	2015	1	2	13	7
20150214	2015	1	2	14	7
20150215	2015	1	2	15	8
20150215	2015	1	2	15	8
20150224	2015	1	2	24	9
20150228	2015	1	2	28	9
20150303	2015	1	3	3	10
20150304	2015	1	3	4	10
20150315	2015	1	3	15	12
20150407	2015	2	4	7	15
20150410	2015	2	4	10	15
20150410	2015	2	4	10	15
20150411	2015	2	4	11	15
20150417	2015	2	4	17	16
20150501	2015	2	5	1	18
20150505	2015	2	5	5	19
20150510	2015	2	5	10	20
20150515	2015	2	5	15	20
20150529	2015	2	5	29	22
20150714	2015	3	7	14	29
20150820	2015	3	8	20	34

20150901	2015	3	9	1	36
20151017	2015	4	10	17	42
20151030	2015	4	10	30	44

## Fact Tables are: Leads

<i>Lead_Id</i>	<i>Quote_Qty</i>	<i>Quote_Price</i>	<i>Quote_Value</i>	<i>Success</i>	<i>Created_Date</i>	<i>Cust_Key</i>	<i>Location_Name</i>	<i>Sales_Agent_Id</i>	<i>Sales_Class_Desc</i>
555555	100000	1.1	107800	TRUE	20131205	111111	Denver HQ	1	Credit Card Smart
665556	200000	0.8	133000	TRUE	20141120	111112	Denver HQ	2	Credit Card Mag
690006	175000	0.7	118825	TRUE	20150417	111113	Montreal Plant	3	Debit Card Smart
734033	50000	1.5	73500	TRUE	20140810	111113	Atlanta Division	1	Credit Card Mag
633557	80000	1.5	114000	TRUE	20140517	111111	Atlanta Division	1	Credit Card Mag
756778	160000	1.3	195520	TRUE	20150714	111111	Atlanta Division	1	Credit Card Mag
333125	95000	0.9	83790	FALSE	20130608	111114	Denver HQ	3	Credit Card Mag
673125	115000	0.9	100395	FALSE	20140315	111112	Montreal Plant	2	Credit Card Smart

## Sales(Summary)

<i>Summary_Sales_Id</i>	<i>Actual_Units</i>	<i>Actual_Amount</i>	<i>Forecast_Units</i>	<i>Forecast_Amount</i>	<i>Location_Name</i>	<i>Sales_Class_Desc</i>	<i>Begin_Date</i>	<i>End_Date</i>
1	759,000	\$993,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140101	20140131
2	1,636,000	1,883,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140201	20140228
3	2,323,000	3,103,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140301	20140331
4	2,892,000	3,896,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140401	20140430

5	3,769,000	5,116,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140501	20140531
6	4,646,000	6,336,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140601	20140630
7	5,523,000	7,556,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140701	20140731
8	6,400,000	8,776,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140801	20140831
9	7,277,000	9,996,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20140901	20140930
10	8,154,000	11,216,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20141001	20141031
11	9,031,000	12,436,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20141101	20141130
12	9,908,000	13,656,800	10,000,000.00	\$13,500,000	Denver HQ	Credit Card Smart	20141201	20141231

### Cost(Summary)

Summary_Cost_Id	Actual_Units	Actual_Labor_Cost	Actual_Material_Cost	Actual_Overhead_Cost	Actual_Machine_Cost	Budget_Units	Budget_Labor_Cost	Budget_Material_Cost	Budget_Overhead_Cost	Budget_Machine_Cost	Location_Name	Machine_Type_Id	Sales_Class_Desc	Begin_Date	End_Date
1	1,125,000	\$326,250	\$191,250	\$135,000	\$202,500	13,500,000	\$3,915,000	\$2,295,000	\$1,620,000	\$2,430,000	Denver HQ	1	Credit Card Smart	20140101	20140131
2	2,081,250	\$603,563	\$353,813	\$249,750	\$374,625	13,500,000	\$3,915,000	\$2,295,000	\$1,620,000	\$2,430,000	Denver HQ	1	Credit Card Smart	20140201	20140228
3	3,037,500	\$880,875	\$516,375	\$364,500	\$546,750	13,500,000	\$3,915,000	\$2,295,000	\$1,620,000	\$2,430,000	Denver HQ	1	Credit Card Smart	20140301	20140331

4	3,993,750	\$1,158,188	\$678,938	\$479,250	\$718,875	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0401	201404 30
5	4,950,000	\$1,435,500	\$841,500	\$594,000	\$891,000	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0501	201405 31
6	5,906,250	\$1,712,813	\$1,004,063	\$708,750	\$1,063,125	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0601	201406 30
7	6,862,500	\$1,990,125	\$1,166,625	\$823,500	\$1,235,250	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0701	201407 31
8	8,043,750	\$2,332,688	\$1,367,438	\$965,250	\$1,447,875	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0801	201408 31
9	9,000,000	\$2,610,000	\$1,530,000	\$1,080,000	\$1,620,000	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 0901	201409 30
10	10,091,250	\$2,926,463	\$1,715,513	\$1,210,950	\$1,816,425	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 1001	201410 31
11	11,047,500	\$3,203,775	\$1,878,075	\$1,325,700	\$1,988,550	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 1101	201411 30
12	12,150,000	\$3,523,500	\$2,065,500	\$1,458,000	\$2,187,000	13,500,000	\$3,915,000.0	\$2,295,000	\$1,620,000	\$2,430,000	Denv er HQ	1	Credit Card Smart	2014 1201	201412 31

Invoice

Invoice_Id	Date_Due	Date_Invoiced	Invoice_Amount	Cust_Key	Invoice_Quantity	Invoice_Shipped
111111	20140215	20140124	37500	111111	25400	25500

111112	20140314	20140224	9000	111111	9000	9000
111113	20150310	20150224	42500	111112	30900	32000

## Job

<i>Job_Id</i>	<i>Number_SubJobs</i>	<i>Contract_Date</i>	<i>Date_Promise_d</i>	<i>Unit_Price</i>	<i>Quantity_Ordered</i>	<i>Quotation_Amount</i>	<i>Quotation_Quantity</i>	<i>Location_name</i>	<i>Sales_Class_Desc</i>	<i>Sales_Agent_Id</i>	<i>Cust_Key</i>
111111	5	20140103	20140301	1.1	100000	107800	100000	DenverHQ	CreditCardSmart	1	111111
222222	4	20150103	20150303	0.8	200000	152000	200000	DenverHQ	CreditCardMag	2	111112
333333	6	20150403	20150515	0.7	150000	118825	175000	MontrealPlant	DebitCardSmart	3	111113
444444	3	20140603	20140915	1.5	50000	73500	50000	LondonPlant	DebitCardSmart	3	111113
555555	4	20141005	20141215	1.5	75000	114000	80000	AtlantaDivision	CreditCardMag	1	111111
666666	6	20150501	20150901	1.3	160000	195520	160000	AtlantaDivision	CreditCardMag	1	111111

## SubJob

<i>Job_Id</i>	<i>SubJob_Id</i>	<i>Cost_Labor</i>	<i>Cost_Material</i>	<i>Cost_Overhead</i>	<i>Machine_Hours</i>	<i>Date_Production_Begin</i>	<i>Date_Production_End</i>	<i>Quantity_Produced</i>	<i>Machine_Type_Id</i>
111111	1	7000	5000	200	10	20140105	2014017	20000	1
111111	2	8000	5500	300	15	20140125	20140215	30000	2
222222	1	9000	6600	400	17	20150110	20150214	35000	3
222222	2	8500	6000	450	20	20150125	20150228	35000	2

333 333	1	7500	5600	300	20	201504 07	20150410	25000	3
444 444	1	6500	4200	300	15	201406 15	20140707	20000	1

## Shipment

<i>Ship ment _Id</i>	<i>Actual_ Ship_D ate</i>	<i>Requested_S hip_Date</i>	<i>Actual_Q uantity</i>	<i>Reque sted_ Quant ity</i>	<i>Box es</i>	<i>Quan tity_ Per_ Box</i>	<i>Quantity _Per_Par tial_Box</i>	<i>Shipm ent_A mount</i>	<i>Job_I d</i>	<i>Su bjo b_I d</i>	<i>Invoic e_id</i>	<i>Cust_L oc_Ke y</i>
1111 11	201401 15	20140110	10000	10000	10	1000	0	15000	1111 11	1	11111 1	11111 11
1111 12	201401 17	20140117	15500	15500	15	1000	500	22500	1111 11	1	11111 1	11111 12
1111 13	201402 02	20140203	10000	10000	3	3000	1000	9000	1111 11	2	11111 2	11111 11
1111 14	201501 26	20150125	10000	10000	6	1500	1000	13500	2222 22	1	11111 3	11111 21
1111 15	201502 02	20150203	10000	10000	6	1500	1000	13500	2222 22	1	11111 3	11111 21
1111 16	201502 15	20150213	15000	12000	8	1400	800	15500	2222 22	2	11111 3	11111 21
1111 17	201504 10	20150411	10000	10000	7	1500	500	7000	3333 33	1	NULL	11111 31