LAB – 1: TO LEARN VIEWS IN SQL

This Document contains Screenshots of the output of the queries. Queries and explanations/answers (given as comments) are attached in another file.

Step 1: Installed SSMS and Imported Database WorldWideImporters

3. Create View of the Data

a)

i)

	SupplierID	SupplierName	SupplierCategoryID	PrimaryContactPersonID	AlternateContactPersonID	DeliveryMethodID	DeliveryCityID	PostalCityID	SupplierReference	BankAccountName	BankAccountBranch
1	1	A Datum Corporation	2	21	22	7	38171	38171	AA20384	A Datum Corporation	Woodgrove Bank Zionsville
2	2	Contoso, Ltd.	2	23	24	9	13870	13870	B2084020	Contoso Ltd	Woodgrove Bank Greenbank
3	3	Consolidated Messenger	6	25	26	NULL	30378	30378	209340283	Consolidated Messenger	Woodgrove Bank San Francisco
4	4	Fabrikam, Inc.	4	27	28	7	18557	18557	293092	Fabrikam Inc	Woodgrove Bank Lakeview Heigh
5	5	Graphic Design Institute	2	29	30	10	18634	18634	08803922	Graphic Design Institute	Woodgrove Bank Lanagan

ii)

	SupplierCategoryID	SupplierCategoryName	LastEditedBy	ValidFrom	ValidTo
1	2	Novelty Goods Supplier	1	2013-01-01 00:00:00.0000000	9999-12-31 23:59:59.9999999

iii)

	PersonID	FullName	PreferredName	SearchName	IsPermittedToLogon	LogonName	IsExternalLogonProvider	HashedPassword	IsSystemUser	IsEmployee	IsSalesperson	UserPreferences	Ph
1	21	Reio Kabin	Reio	Reio Reio Kabin	0	NO LOGON	0	NULL	0	0	0	{"theme":"ui-darkness","dateFormat":"yy-mm-dd"...	(84
2	22	Oliver Kivi	Olly	Olly Oliver Kivi	0	NO LOGON	0	NULL	0	0	0	{"theme":"blitzer","dateFormat":"dd/mm/yy","timeZ...	(84

b) Creating View named 'Purchasing.SupplierDetailColumns':

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Commands completed successfully.

Completion time: 2021-06-15T15:13:17.6484806+05:30
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Output of View 'Purchasing.SupplierDetailColumns':

	SupplierName	SupplierCategoryName	PrimaryContact	PrimaryPhone	PrimaryEmail	AlternateContact	AlternatePhone	AlternateEmail
1	A Datum Corporation	Novelty Goods Supplier	Reio Kabin	(847) 555-0100	reio@adatum.com	Oliver Kivi	(847) 555-0100	olly@adatum.com
2	Contoso, Ltd.	Novelty Goods Supplier	Hanna Mihhailov	(360) 555-0100	hannam@contoso.com	Paulus Lippmaa	(360) 555-0100	paulusl@contoso.com
3	Consolidated Messenger	Courier Services Supplier	Kerstin Parn	(415) 555-0100	kerstin@consolidatedmessenger.com	Helen Ahven	(415) 555-0100	helen@consolidatedmessenger.com
4	Fabrikam, Inc.	Clothing Supplier	Bill Lawson	(203) 555-0107	billl@fabrikam.com	Helen Moore	(203) 555-0104	helenm@fabrikam.com
5	Graphic Design Institute	Novelty Goods Supplier	Penny Buck	(406) 555-0107	pennyb@graphicdesigninstitute.com	Donna Smith	(406) 555-0101	donnas@graphicdesigninstitute.com
6	Humongous Insurance	Insurance Services Supplier	Madelaine Cartier	(423) 555-0101	madelainec@humongousinsurance.com	Annette Talon	(423) 555-0106	annettet@humongousinsurance.com
7	Litware, Inc.	Packaging Supplier	Elias Myllari	(209) 555-0101	eliasm@litwareinc.com	Vilma Niva	(209) 555-0103	vilman@litwareinc.com
8	Lucerne Publishing	Novelty Goods Supplier	Prem Prabhu	(423) 555-0102	premp@lucernepublishing.com	Sunita Jadhav	(423) 555-0101	sunitaj@lucernepublishing.com
9	Nod Publishers	Novelty Goods Supplier	Marcos Costa	(252) 555-0106	marcosc@nodpublishers.com	Matheus Oliveira	(252) 555-0107	matheuso@nodpublishers.com
10	Northwind Electric Cars	Toy Supplier	Eliza Soderberg	(201) 555-0100	elizas@northwindelectriccars.com	Sara Karlsson	(201) 555-0100	sarak@northwindelectriccars.com
11	Trey Research	Marketing Services Supplier	Donald Jones	(605) 555-0101	donaldj@treyresearch.net	Sharon Graham	(605) 555-0106	sharong@treyresearch.net
12	The Phone Company	Novelty Goods Supplier	Hai Dam	(218) 555-0101	haid@thephone-company.com	Thanh Dinh	(218) 555-0104	thanhd@thephone-company.com
13	Woodgrove Bank	Financial Services Supplier	Hubert Helms	(415) 555-0103	huberth@woodgrovebank.com	Donald Small	(415) 555-0105	donalds@woodgrovebank.com

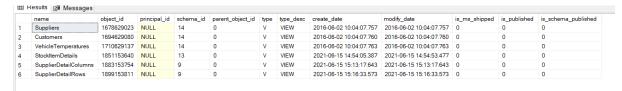## Creating another view named 'Purchasing.SupplierDetailRows':

Output of View 'Purchasing.SupplierDetailRows':

	SupplierName	SupplierCategoryName	ContactType	Contact	Phone	Email
1	A Datum Corporation	Novelty Goods Supplier	Alternate Contact	Oliver Kivi	(847) 555-0100	olly@adatum.com
2	A Datum Corporation	Novelty Goods Supplier	Primary Contact	Reio Kabin	(847) 555-0100	reio@adatum.com
3	Consolidated Messenger	Courier Services Supplier	Alternate Contact	Helen Ahven	(415) 555-0100	helen@consolidatedmessenger.com
4	Consolidated Messenger	Courier Services Supplier	Primary Contact	Kerstin Parn	(415) 555-0100	kerstin@consolidatedmessenger.com
5	Contoso, Ltd.	Novelty Goods Supplier	Alternate Contact	Paulus Lippmaa	(360) 555-0100	paulusl@contoso.com
6	Contoso, Ltd.	Novelty Goods Supplier	Primary Contact	Hanna Mihhailov	(360) 555-0100	hannam@contoso.com
7	Fabrikam, Inc.	Clothing Supplier	Alternate Contact	Helen Moore	(203) 555-0104	helenm@fabrikam.com
8	Fabrikam, Inc.	Clothing Supplier	Primary Contact	Bill Lawson	(203) 555-0107	billl@fabrikam.com
9	Graphic Design Institute	Novelty Goods Supplier	Alternate Contact	Donna Smith	(406) 555-0101	donnas@graphicdesigninstitute.com
10	Graphic Design Institute	Novelty Goods Supplier	Primary Contact	Penny Buck	(406) 555-0107	pennyb@graphicdesigninstitute.com
11	Humongous Insurance	Insurance Services Supplier	Alternate Contact	Annette Talon	(423) 555-0106	annettet@humongousinsurance.com
12	Humongous Insurance	Insurance Services Supplier	Primary Contact	Madelaine Cartier	(423) 555-0101	madelainec@humongousinsurance.com
13	Litware, Inc.	Packaging Supplier	Alternate Contact	Vilma Niva	(209) 555-0103	vilman@litwareinc.com
14	Litware, Inc.	Packaging Supplier	Primary Contact	Elias Myllari	(209) 555-0101	eliasm@litwareinc.com
15	Lucerne Publishing	Novelty Goods Supplier	Alternate Contact	Sunita Jadhav	(423) 555-0101	sunitaj@lucernepublishing.com
16	Lucerne Publishing	Novelty Goods Supplier	Primary Contact	Prem Prabhu	(423) 555-0102	premp@lucernepublishing.com
17	Nod Publishers	Novelty Goods Supplier	Alternate Contact	Matheus Oliveira	(252) 555-0107	matheuso@nodpublishers.com

c) Output of the given query:

	name	object_id	principal_id	schema_id	parent_object_id	type	type_desc	create_date	modify_date	is_ms_shipped	is_published	is_schema_published
1	Suppliers	1678629023	NULL	14	0	V	VIEW	2016-06-02 10:04:07.757	2016-06-02 10:04:07.757	0	0	0
2	Customers	1694629080	NULL	14	0	V	VIEW	2016-06-02 10:04:07.760	2016-06-02 10:04:07.760	0	0	0
3	VehicleTemperatures	1710629137	NULL	14	0	V	VIEW	2016-06-02 10:04:07.763	2016-06-02 10:04:07.763	0	0	0
4	StockItemDetails	1851153640	NULL	13	0	V	VIEW	2021-06-15 14:54:05.387	2021-06-15 14:54:53.477	0	0	0
5	SupplierDetailColumns	1883153754	NULL	9	0	V	VIEW	2021-06-15 15:13:17.643	2021-06-15 15:13:17.643	0	0	0
6	SupplierDetailRows	1899153811	NULL	9	0	V	VIEW	2021-06-15 15:16:33.573	2021-06-15 15:16:33.573	0	0	0

Output after modifying the query and getting same output as given:

	object_id	schema_name	view_name
1	1694629080	Website	Customers
2	1883153754	Purchasing	SupplierDetailColumns
3	1678629023	Website	Suppliers
4	1710629137	Website	VehicleTemperatures

Output of another given query:

	object_id	definition	uses_ansi_nulls	uses_quoted_identifier	is_schema_bound	uses_database_collation	is_recompiled	null_on_null_input	execute_as_principal_id	uses_native_compila
1	1678629023	CREATE VIEW Website.Suppliers AS SELECT s.Su...	1	1	0	0	0	0	NULL	0

	Text
1	
2	CREATE VIEW Website.Suppliers
3	AS
4	SELECT s.SupplierID,
5	s.SupplierName,
6	sc.SupplierCategoryName,
7	pp.FullName AS PrimaryContact,
8	ap.FullName AS AlternateContact,
9	s.PhoneNumber,
10	s.FaxNumber,
11	s.WebsiteURL,
12	dm.DeliveryMethodName AS DeliveryMethod,
13	c.CityName AS CityName,
14	s.DeliveryLocation AS DeliveryLocation,
15	s.SupplierReference
16	FROM Purchasing.Suppliers AS s
17	LEFT OUTER JOIN Purchasing.SupplierCategories AS...

4. Screenshots for section 'SchemaBind' View after performing all given operations:

	CustomerTransactionID	CustomerID	TransactionTypeID	InvoiceID	PaymentMethodID	TransactionDate	PreTaxTotal	TaxAmount	TransactionAmount	OutstandingBalance	FinalizationDate	IsFinalized	LastEditedBy	LastEditedW
1	335886	890	1	70427	NULL	2016-05-31	648.00	97.20	745.20	745.20	NULL	0	3	2016-05-31
2	335888	849	1	70428	NULL	2016-05-31	175.00	26.25	201.25	201.25	NULL	0	3	2016-05-31
3	335890	1	1	70429	NULL	2016-05-31	432.00	64.80	496.80	496.80	NULL	0	3	2016-05-31
4	335896	401	1	70430	NULL	2016-05-31	2197.30	329.60	2526.90	2526.90	NULL	0	3	2016-05-31
5	335901	1	1	70431	NULL	2016-05-31	1247.00	187.05	1434.05	1434.05	NULL	0	3	2016-05-31
6	335906	925	1	70432	NULL	2016-05-31	1661.50	249.23	1910.73	1910.73	NULL	0	3	2016-05-31
7	335911	937	1	70433	NULL	2016-05-31	1963.80	253.53	2217.33	2217.33	NULL	0	3	2016-05-31
8	335916	900	1	70434	NULL	2016-05-31	3269.60	408.36	3677.96	3677.96	NULL	0	3	2016-05-31
9	335919	910	1	70435	NULL	2016-05-31	370.50	55.58	426.08	426.08	NULL	0	3	2016-05-31
10	335925	401	1	70436	NULL	2016-05-31	5917.20	887.58	6804.78	6804.78	NULL	0	3	2016-05-31
11	335931	1	1	70437	NULL	2016-05-31	1119.20	167.88	1287.08	1287.08	NULL	0	3	2016-05-31
12	335934	933	1	70438	NULL	2016-05-31	1064.00	159.60	1223.60	1223.60	NULL	0	3	2016-05-31
13	335939	1	1	70439	NULL	2016-05-31	2888.90	310.22	3199.12	3199.12	NULL	0	3	2016-05-31
14	335945	1	1	70440	NULL	2016-05-31	1406.80	211.02	1617.82	1617.82	NULL	0	3	2016-05-31
15	335950	1018	1	70441	NULL	2016-05-31	2329.00	349.35	2678.35	2678.35	NULL	0	3	2016-05-31
16	335955	813	1	70442	NULL	2016-05-31	5015.50	752.33	5767.83	5767.83	NULL	0	3	2016-05-31

	Transaction Number	Customer Number	Order Date	Amount Before Tax	Tax Due	Balance Due
1	335886	890	2016-05-31	648.00	97.20	745.20
2	335888	849	2016-05-31	175.00	26.25	201.25
3	335890	1	2016-05-31	432.00	64.80	496.80
4	335896	401	2016-05-31	2197.30	329.60	2526.90
5	335901	1	2016-05-31	1247.00	187.05	1434.05
6	335906	925	2016-05-31	1661.50	249.23	1910.73
7	335911	937	2016-05-31	1963.80	253.53	2217.33
8	335916	900	2016-05-31	3269.60	408.36	3677.96
9	335919	910	2016-05-31	370.50	55.58	426.08
10	335925	401	2016-05-31	5917.20	887.58	6804.78
11	335931	1	2016-05-31	1119.20	167.88	1287.08
12	335934	933	2016-05-31	1064.00	159.60	1223.60
13	335939	1	2016-05-31	2888.90	310.22	3199.12
14	335945	1	2016-05-31	1406.80	211.02	1617.82
15	335950	1018	2016-05-31	2329.00	349.35	2678.35
16	335955	813	2016-05-31	5015.50	752.33	5767.83
17	335959	1	2016-05-31	4208.40	631.26	4839.66

ERROR:

```
Msg 15248, Level 11, State 1, Procedure sp_rename, Line 247 [Batch Start Line 147]
Either the parameter @objname is ambiguous or the claimed @objtype (COLUMN) is wrong.
```

BEFORE DROPING 'Sales.OutstandingBalance' SCHEMABOUND VIEW:

	referencing_schema_name	referencing_entity_name	object_id	definition	is_schema_bound
1	Integration	GetTransactionUpdates	1950629992	CREATE PROCEDURE Integration.GetTransactionUpdat...	0
2	Sales	OutstandingBalance	1915153868	CREATE VIEW Sales.OutstandingBalance WITH SCHEMA...	1
3	Website	InvoiceCustomerOrders	1387151987	CREATE PROCEDURE Website.InvoiceCustomerOrders ...	0

AFTER DROPPING 'Sales.OutstandingBalance' SCHEMABOUND VIEW:

	referencing_schema_name	referencing_entity_name	object_id	definition	is_schema_bound
1	Integration	GetTransactionUpdates	1950629992	CREATE PROCEDURE Integration.GetTransactionUpd...	0
2	Website	InvoiceCustomerOrders	1387151987	CREATE PROCEDURE Website.InvoiceCustomerOrder...	0

5. Screenshots for section 'Leverage view objects with indexes' after performing all given operations:

	StockItemStockGroupID	StockItemName	QuantityOnHand	StockGroupName	ColorName	UnitPrice	SupplierID
1	207	"The Gu" red shirt XML tag t-shirt (White) 3XS	129929	Clothing	White	18.00	4
2	210	"The Gu" red shirt XML tag t-shirt (White) XXS	27	Clothing	White	18.00	4
3	213	"The Gu" red shirt XML tag t-shirt (White) XS	16	Clothing	White	18.00	4
4	216	"The Gu" red shirt XML tag t-shirt (White) S	24895	Clothing	White	18.00	4
5	219	"The Gu" red shirt XML tag t-shirt (White) M	20	Clothing	White	18.00	4
6	222	"The Gu" red shirt XML tag t-shirt (White) L	106773	Clothing	White	18.00	4
7	225	"The Gu" red shirt XML tag t-shirt (White) XL	6706	Clothing	White	18.00	4
8	228	"The Gu" red shirt XML tag t-shirt (White) XXL	224185	Clothing	White	18.00	4
9	231	"The Gu" red shirt XML tag t-shirt (White) 3XL	5439	Clothing	White	18.00	4
10	234	"The Gu" red shirt XML tag t-shirt (White) 4XL	56210	Clothing	White	18.00	4
11	237	"The Gu" red shirt XML tag t-shirt (White) 5XL	3	Clothing	White	18.00	4
12	240	"The Gu" red shirt XML tag t-shirt (White) 6XL	53392	Clothing	White	18.00	4
13	243	"The Gu" red shirt XML tag t-shirt (White) 7XL	148350	Clothing	White	18.00	4
14	246	"The Gu" red shirt XML tag t-shirt (Black) 3XS	81703	Clothing	Black	18.00	4
15	249	"The Gu" red shirt XML tag t-shirt (Black) XXS	75663	Clothing	Black	18.00	4
16	252	"The Gu" red shirt XML tag t-shirt (Black) XS	76373	Clothing	Black	18.00	4
17	255	"The Gu" red shirt XML tag t-shirt (Black) S	82253	Clothing	Black	18.00	4

Index created successfully:

```
Commands completed successfully.

Completion time: 2021-06-15T15:33:33.1251479+05:30
```

Adding additional data by merging data to view:

	StockItemStockGroupID	StockItemName	QuantityOnHand	StockGroupName	ColorName	UnitPrice	SupplierID	SupplierID	SupplierName	SupplierCategoryID	PrimaryContactPersonID	Alter
1	47	DBA joke mug - mind if I join you? (White)	51836	Novelty Items	White	13.00	5	5	Graphic Design Institute	2	29	30
2	46	DBA joke mug - mind if I join you? (White)	51836	Mugs	White	13.00	5	5	Graphic Design Institute	2	29	30
3	45	DBA joke mug - mind if I join you? (White)	51836	Computing Novelties	White	13.00	5	5	Graphic Design Institute	2	29	30
4	50	DBA joke mug - mind if I join you? (Black)	62428	Novelty Items	Black	13.00	5	5	Graphic Design Institute	2	29	30
5	49	DBA joke mug - mind if I join you? (Black)	62428	Mugs	Black	13.00	5	5	Graphic Design Institute	2	29	30
6	48	DBA joke mug - mind if I join you? (Black)	62428	Computing Novelties	Black	13.00	5	5	Graphic Design Institute	2	29	30
7	53	DBA joke mug - daaaaaa-ta (White)	89207	Novelty Items	White	13.00	5	5	Graphic Design Institute	2	29	30
8	52	DBA joke mug - daaaaaa-ta (White)	89207	Mugs	White	13.00	5	5	Graphic Design Institute	2	29	30
9	51	DBA joke mug - daaaaaa-ta (White)	89207	Computing Novelties	White	13.00	5	5	Graphic Design Institute	2	29	30
10	56	DBA joke mug - daaaaaa-ta (Black)	68800	Novelty Items	Black	13.00	5	5	Graphic Design Institute	2	29	30
11	55	DBA joke mug - daaaaaa-ta (Black)	68800	Mugs	Black	13.00	5	5	Graphic Design Institute	2	29	30
12	54	DBA joke mug - daaaaaa-ta (Black)	68800	Computing Novelties	Black	13.00	5	5	Graphic Design Institute	2	29	30
13	59	DBA joke mug - you might be a DBA if (White)	66722	Novelty Items	White	13.00	5	5	Graphic Design Institute	2	29	30
14	58	DBA joke mug - you might be a DBA if (White)	66722	Mugs	White	13.00	5	5	Graphic Design Institute	2	29	30
15	57	DBA joke mug - you might be a DBA if (White)	66722	Computing Novelties	White	13.00	5	5	Graphic Design Institute	2	29	30
16	62	DBA joke mug - you might be a DBA if (Black)	68683	Novelty Items	Black	13.00	5	5	Graphic Design Institute	2	29	30