



Data Warehousing & Business Intelligence (IT)

3rd Year, 1st Semester

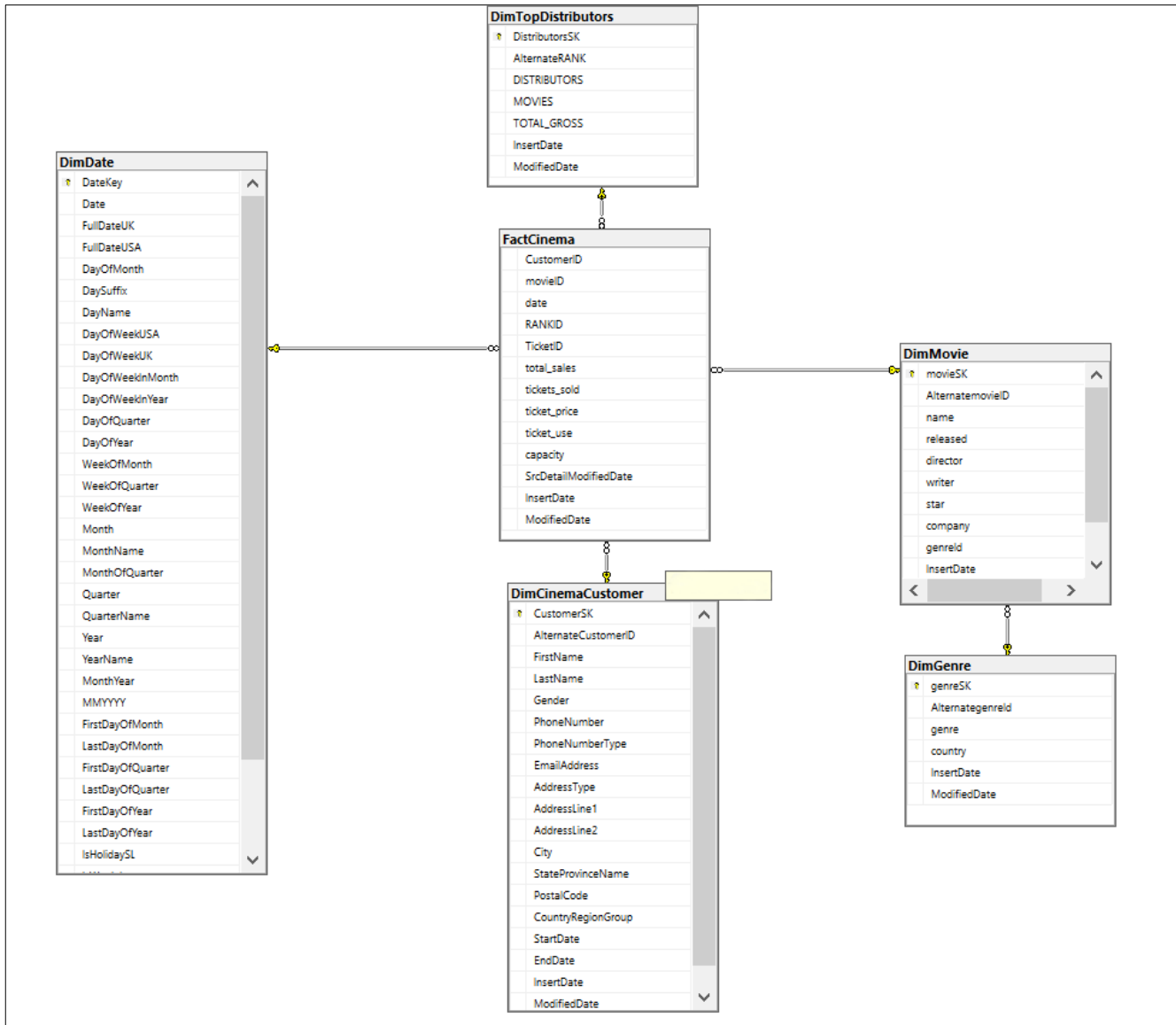
Assignment 2

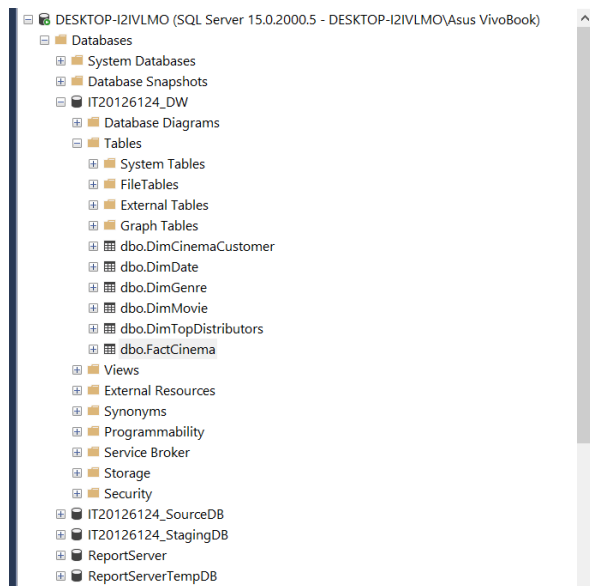
Submitted to
Sri Lanka Institute of Information
Technology

IT20126124
Kumarasinghe S
Weekday Batc

Step 1: Data source for the assignment 2

- **IT20126124_DW** that I have implemented and loaded with data in Assignment 1 as the data source for the assignment 2.





DimCinemaCustomer

SQLQuery17.sql - Asus VivoBook (51)*

```
select * from DimCinemaCustomer
```

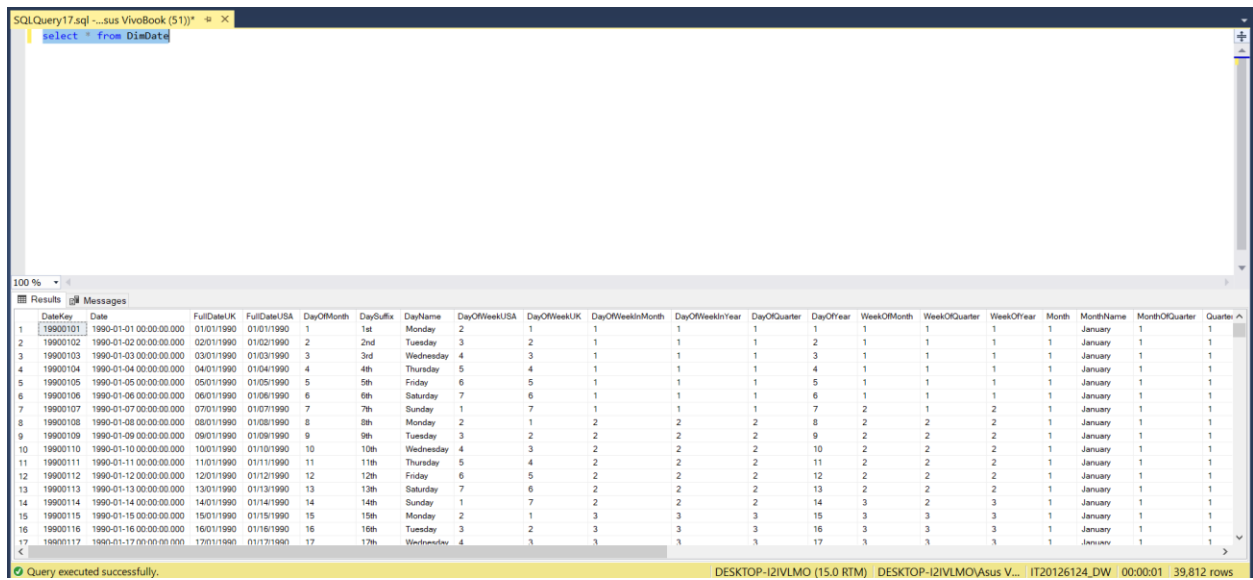
CustomerSK	AlternateCustomerID	FirstName	LastName	Gender	PhoneNumber	PhoneNumberType	EmailAddress	AddressType	AddressLine1	City	StateProvinceName	PostalCode	CountryRegionGroup	StartDate	EndDate	InsertDate	ModifiedDate
1	11000	Jon	Yang	M	1 (11) 500 555-0162	Home	jon24@adventure-works.com	Home	3781 N. 14th St	Rockhampton	Queensland	4700	Australia	2022-05-11 00:33:24.000			
2	11001	Eugene	Huang	M	1 (11) 500 555-0110	Cell	eugene10@adventure-works.com	Home	2243 W St	Seaford	Victoria	3198	Australia	2022-05-11 00:33:24.000			
3	11002	Ruben	Torres	M	1 (11) 500 555-0184	Home	ruben35@adventure-works.com	Home	5844 Linden Land	Hobart	Tasmania	7001	Australia	2022-05-11 00:33:24.000			
4	11003	Christy	Zhu	F	1 (11) 500 555-0162	Cell	christy12@adventure-works.com	Home	1825 Village Pl	North Ryde	New South Wales	2113	Australia	2022-05-11 00:33:24.000			
5	11004	Elizabeth	Johnson	F	1 (11) 500 555-0131	Home	elizabeth5@adventure-works.com	Home	7553 Harness Circle	Wollongong	New South Wales	2500	Australia	2022-05-11 00:33:24.000			
6	11005	Julio	Ruiz	M	1 (11) 500 555-0151	Cell	julio18@adventure-works.com	Home	7305 Humphrey Drive	East Brisbane	Queensland	4169	Australia	2022-05-11 00:33:24.000			
7	11006	Janet	Alvarez	F	1 (11) 500 555-0184	Cell	janet9@adventure-works.com	Home	2612 Berry Dr	Mataville	New South Wales	2036	Australia	2022-05-11 00:33:24.000			
8	11007	Marco	Mehta	M	1 (11) 500 555-0126	Cell	marco14@adventure-works.com	Home	942 Brook Street	Warrambool	Victoria	3200	Australia	2022-05-11 00:33:24.000			
9	11008	Rob	Verhoff	F	1 (11) 500 555-0164	Cell	rob4@adventure-works.com	Home	624 Peabody Road	Bendigo	Victoria	3550	Australia	2022-05-11 00:33:24.000			
10	11009	Shannon	Carlson	M	1 (11) 500 555-0110	Cell	shannon38@adventure-works.com	Home	3839 Northgate Road	Hervey Bay	Queensland	4655	Australia	2022-05-11 00:33:24.000			
11	11010	Jacquelyn	Swanez	F	1 (11) 500 555-0169	Home	jacquelyn20@adventure-works.com	Home	7800 Corrine Court	East Brisbane	Queensland	4169	Australia	2022-05-11 00:33:24.000			
12	11011	Curtis	Lu	M	1 (11) 500 555-0117	Home	curn9@adventure-works.com	Home	1224 Shoenic	East Brisbane	Queensland	4169	Australia	2022-05-11 00:33:24.000			
13	11012	Lauren	Walker	F	717-555-0164	Home	lauren41@adventure-works.com	Home	4785 Scott Street	Bremerton	Washington	98312	United States	2022-05-11 00:33:24.000			
14	11013	Ian	Jenkins	M	817-555-0185	Cell	ian47@adventure-works.com	Home	7902 Hudson Ave.	Lebanon	Oregon	97355	United States	2022-05-11 00:33:24.000			
15	11014	Sydney	Bennett	F	431-555-0156	Cell	sydney23@adventure-works.com	Home	9011 Tank Drive	Redmond	Washington	98052	United States	2022-05-11 00:33:24.000			
16	11015	Chloe	Young	F	208-555-0142	Home	chloe23@adventure-works.com	Home	244 Willow Pass Road	Burbank	California	91502	United States	2022-05-11 00:33:24.000			
17	11016	Wyatt	Hill	M	136-555-0171	Home	wyatt32@adventure-works.com	Home	9688 Hountridge Ct.	Imperial Be...	California	91932	United States	2022-05-11 00:33:24.000			
18	11017	Shannon	Wang	F	1 (11) 500 555-0195	Home	shannon18@adventure-works.com	Home	7230 Saddlehill Lane	Surbury	Victoria	3429	Australia	2022-05-11 00:33:24.000			
19	11018	Clarence	Rai	M	550-555-0137	Home	clarence32@adventure-works.com	Home	244 Riverside	Bendigo	Victoria	3550	Australia	2022-05-11 00:33:24.000			
20	11019	Luke	Lal	M	262-555-0112	Home	luke18@adventure-works.com	Home	7832 Landing Dr	Langley	British Columbia	V3A 4R2	Canada	2022-05-11 00:33:24.000			
21	11020	Jordan	King	M	550-555-0163	Home	jordan73@adventure-works.com	Home	7156 Rose Dr	Metochos	British Columbia	V9	Canada	2022-05-11 00:33:24.000			
22	11021	Destiny	Wilson	F	622-555-0158	Home	destiny7@adventure-works.com	Home	8148 W. Lake Dr.	Beaverton	Oregon	97005	United States	2022-05-11 00:33:24.000			
23	11022	Ethan	Zhang	M	509-555-0185	Home	ethan20@adventure-works.com	Home	1789 Nicholas Drive	Bellingham	Washington	98225	United States	2022-05-11 00:33:24.000			
24	11023	Seth	Edwards	M	452-555-0158	Cell	seth45@adventure-works.com	Home	4499 Valley Crest	Bellflower	California	90706	United States	2022-05-11 00:33:24.000			
25	11024	Russell	Xie	M	746-555-0188	Home	russell7@adventure-works.com	Home	8734 Oxford Place	Concord	California	94519	United States	2022-05-11 00:33:24.000			
26	11025	Alejandro	Beck	M	1 (11) 500 555-0178	Home	alejandro45@adventure-works.com	Home	2596 Franklin Canyon	Hawthorne	Queensland	4171	Australia	2022-05-11 00:33:24.000			
27	11026	Marcia	Shi	M	1 (11) 500 555-0131	Home	marcia2@adventure-works.com	Home	8711 N. Maple Dr	Geelong	New South Wales	3210	Australia	2022-05-11 00:33:24.000			

Query executed successfully.

DESKTOP-I2IVLMO (15.0 RTM) | DESKTOP-I2IVLMO\Asus V... | IT20126124_DW | 00:00:00 | 19,119 rows

This Table have 19,119rows CustomerSK, AlternateCustomerID, FirstName, LastName, Gender, PhoneNumber, PhoneNumberType, EmailAddress, AddressType, AddressLine1, AddressLine2, City, StateProvinceName, PostalCode, CountryRegionGroup,StartDate,EndDate,InsertDate,ModifiedDate

DimDate



SQLQuery17.sql -...sus VivoBook (51))

```
select * from DimDate
```

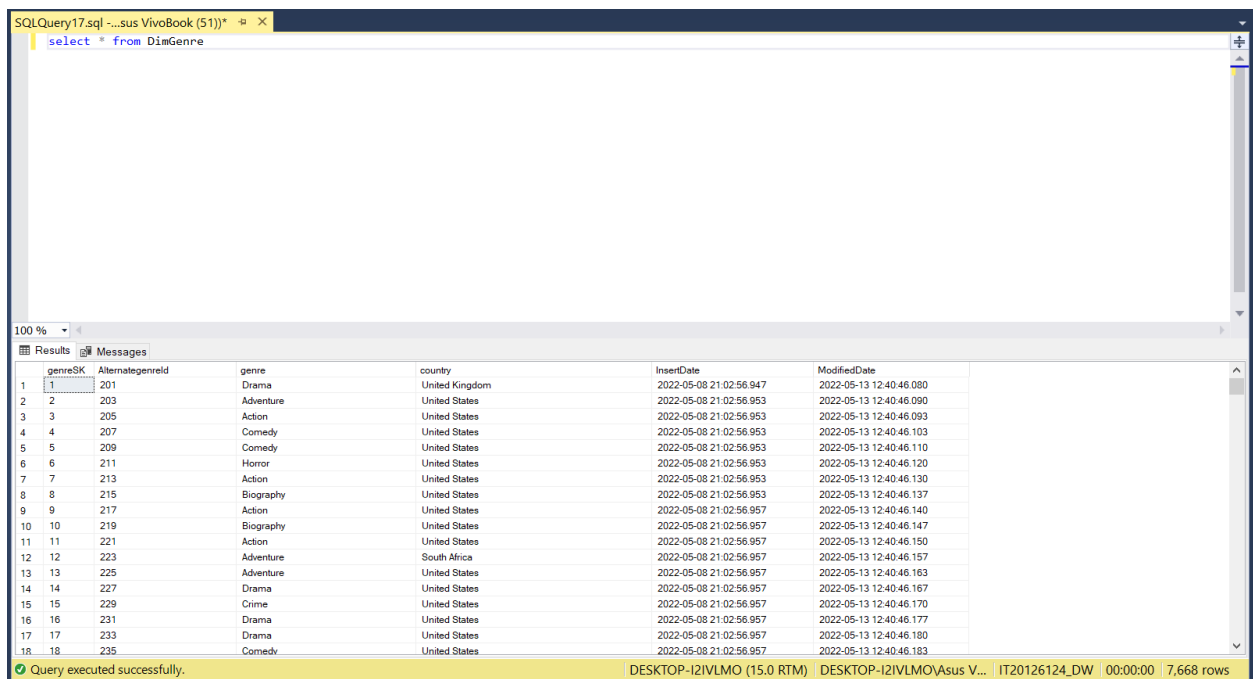
100 %

Results Messages

DayKey	Date	FulDateUK	FulDateUSA	DayOfMonth	DaySuffix	DayName	DayOfWeekUSA	DayOfWeekUK	DayOfWeekMonth	DayOfWeekYear	DayOfQuarter	DayOfYear	WeekOfMonth	WeekOfQuarter	WeekOfYear	Month	MonthName	MonthOfQuarter	Quarter
1	1990-01-01 00:00:00.000	01/01/1990	01/01/1990	1	1st	Monday	2	1	1	1	1	1	1	1	1	1	January	1	1
2	1990-01-02 00:00:00.000	02/01/1990	01/02/1990	2	2nd	Tuesday	3	2	1	1	1	2	1	1	1	1	January	1	1
3	1990-01-03 00:00:00.000	03/01/1990	01/03/1990	3	3rd	Wednesday	4	3	1	1	1	3	1	1	1	1	January	1	1
4	1990-01-04 00:00:00.000	04/01/1990	01/04/1990	4	4th	Thursday	5	4	1	1	1	4	1	1	1	1	January	1	1
5	1990-01-05 00:00:00.000	05/01/1990	01/05/1990	5	5th	Friday	6	5	1	1	1	5	1	1	1	1	January	1	1
6	1990-01-06 00:00:00.000	06/01/1990	01/06/1990	6	6th	Saturday	7	6	1	1	1	6	1	1	1	1	January	1	1
7	1990-01-07 00:00:00.000	07/01/1990	01/07/1990	7	7th	Sunday	1	7	1	1	1	7	2	1	2	1	January	1	1
8	1990-01-08 00:00:00.000	08/01/1990	01/08/1990	8	8th	Monday	2	1	2	2	2	8	2	2	2	1	January	1	1
9	1990-01-09 00:00:00.000	09/01/1990	01/09/1990	9	9th	Tuesday	3	2	2	2	2	9	2	2	2	1	January	1	1
10	1990-01-10 00:00:00.000	10/01/1990	01/10/1990	10	10th	Wednesday	4	3	2	2	2	10	2	2	2	1	January	1	1
11	1990-01-11 00:00:00.000	11/01/1990	01/11/1990	11	11th	Thursday	5	4	2	2	2	11	2	2	2	1	January	1	1
12	1990-01-12 00:00:00.000	12/01/1990	01/12/1990	12	12th	Friday	6	5	2	2	2	12	2	2	2	1	January	1	1
13	1990-01-13 00:00:00.000	13/01/1990	01/13/1990	13	13th	Saturday	7	6	2	2	2	13	2	2	2	1	January	1	1
14	1990-01-14 00:00:00.000	14/01/1990	01/14/1990	14	14th	Sunday	1	7	2	2	2	14	3	2	3	1	January	1	1
15	1990-01-15 00:00:00.000	15/01/1990	01/15/1990	15	15th	Monday	2	1	3	3	3	15	3	3	3	1	January	1	1
16	1990-01-16 00:00:00.000	16/01/1990	01/16/1990	16	16th	Tuesday	3	2	3	3	3	16	3	3	3	1	January	1	1
17	1990-01-17 00:00:00.000	17/01/1990	01/17/1990	17	17th	Wednesday	4	3	3	3	3	17	3	3	3	1	January	1	1

Query executed successfully. DESKTOP-I2IVLMO (15.0 RTM) DESKTOP-I2IVLMO\Asus V... IT20126124_DW 00:00:01 39,812 rows

DimGenre



SQLQuery17.sql -...sus VivoBook (51))

```
select * from DimGenre
```

100 %

Results Messages

genreSK	AlternategenreId	genre	country	InsertDate	ModifiedDate
1	201	Drama	United Kingdom	2022-05-08 21:02:56.947	2022-05-13 12:40:46.080
2	203	Adventure	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.090
3	205	Action	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.093
4	207	Comedy	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.103
5	209	Comedy	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.110
6	211	Horror	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.120
7	213	Action	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.130
8	215	Biography	United States	2022-05-08 21:02:56.953	2022-05-13 12:40:46.137
9	217	Action	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.140
10	219	Biography	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.147
11	221	Action	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.150
12	223	Adventure	South Africa	2022-05-08 21:02:56.957	2022-05-13 12:40:46.157
13	225	Adventure	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.163
14	227	Drama	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.167
15	229	Crime	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.170
16	231	Drama	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.177
17	233	Drama	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.180
18	235	Comedy	United States	2022-05-08 21:02:56.957	2022-05-13 12:40:46.183

Query executed successfully. DESKTOP-I2IVLMO (15.0 RTM) DESKTOP-I2IVLMO\Asus V... IT20126124_DW 00:00:00 7,668 rows

This Table have **7,668 rows**. genreSK, AlternategenreId, genre, country, InsertDate, ModifiedDate

DimMovie

SQLQuery17.sql -...sus VivoBook (51)*

select * from DimMovie

100%

Results Messages

	movieSK	AlternatemovieID	name	released	director	writer	star	company	genreId	InsertDate	ModifiedDate
1	2	501	The Shining	June 13, 1980 (United States)	Stanley Kubrick	Stephen King	Jack Nicholson	Warner Bros.	1	2022-05-10 15:32:48.277	2022-05-13 12:41:50.953
2	3	502	The Blue Lagoon	July 2, 1980 (United States)	Randal Kleiser	Henry De Vere Stacpoole	Brooke Shields	Columbia Pictures	2	2022-05-10 15:32:48.287	2022-05-13 12:41:50.960
3	4	503	Star Wars: Episode V - The Empire Strikes Back	June 20, 1980 (United States)	Ivin Kershner	Leigh Brackett	Mark Hamill	Lucasfilm	3	2022-05-10 15:32:48.287	2022-05-13 12:41:50.963
4	5	504	Airplane!	July 2, 1980 (United States)	Jim Abrahams	Jim Abrahams	Robert Hays	Paramount Pictures	4	2022-05-10 15:32:48.290	2022-05-13 12:41:50.970
5	6	505	Caddyshack	July 25, 1980 (United States)	Harold Ramis	Brian Doyle-Murray	Chevy Chase	Orion Pictures	5	2022-05-10 15:32:48.290	2022-05-13 12:41:50.973
6	7	506	Friday the 13th	May 9, 1980 (United States)	Sean S. Cunningham	Victor Miller	Betsy Palmer	Paramount Pictures	6	2022-05-10 15:32:48.290	2022-05-13 12:41:50.977
7	8	507	The Blues Brothers	June 20, 1980 (United States)	John Landis	Den Aykroyd	John Belushi	Universal Pictures	7	2022-05-10 15:32:48.290	2022-05-13 12:41:50.980
8	9	508	Raging Bull	December 19, 1980 (United States)	Martin Scorsese	Jake LaMotta	Robert De Niro	Charoff-Winkler Productions	8	2022-05-10 15:32:48.290	2022-05-13 12:41:50.983
9	10	509	Superman II	June 19, 1981 (United States)	Richard Lester	Jerry Siegel	Gene Hackman	Dovermead Films	9	2022-05-10 15:32:48.293	2022-05-13 12:41:50.990
10	11	510	The Long Riders	May 16, 1980 (United States)	Walter Hill	Bill Bryden	David Caradine	United Artists	10	2022-05-10 15:32:48.293	2022-05-13 12:41:50.993
11	12	511	Any Which Way You Can	December 17, 1980 (United States)	Buddy Van Horn	Stanford Sherman	Curt Eastwood	The Malpas Company	11	2022-05-10 15:32:48.293	2022-05-13 12:41:50.997
12	13	512	The Gods Must Be Crazy	October 26, 1984 (United States)	Jamie Uys	Jamie Uys	Nkomo	C.A.T. Films	12	2022-05-10 15:32:48.297	2022-05-13 12:41:51.000
13	14	513	Popeye	December 12, 1980 (United States)	Robert Altman	Jules Feiffer	Robin Williams	Paramount Pictures	13	2022-05-10 15:32:48.297	2022-05-13 12:41:51.003
14	15	514	Ordinary People	September 19, 1980 (United States)	Robert Redford	Judith Quest	Donald Sutherland	Paramount Pictures	14	2022-05-10 15:32:48.297	2022-05-13 12:41:51.010
15	16	515	Dressed to Kill	July 25, 1980 (United States)	Brian De Palma	Brian De Palma	Michael Caine	Filmways Pictures	15	2022-05-10 15:32:48.297	2022-05-13 12:41:51.013
16	17	516	Somewhere in Time	October 3, 1980 (United States)	Jeanrol Szwarc	Richard Matheson	Christopher Reeve	Raster Pictures	16	2022-05-10 15:32:48.300	2022-05-13 12:41:51.017
17	18	517	Fame	May 16, 1980 (United States)	Alan Parker	Christopher Gore	Eddie Barth	Metro-Goldwyn-Mayer (MGM)	17	2022-05-10 15:32:48.300	2022-05-13 12:41:51.020
18	19	518	9 to 5	December 19, 1980 (United States)	Colin Higgins	Patricia Resnick	Jane Fonda	IPC Films	18	2022-05-10 15:32:48.300	2022-05-13 12:41:51.023
19	20	519	The Fog	February 8, 1980 (United States)	John Carpenter	John Carpenter	Adrienne Barbeau	AI/CO Embassy Pictures	19	2022-05-10 15:32:48.300	2022-05-13 12:41:51.027
20	21	520	Str. Crazy	December 12, 1980 (United States)	Sidney Pollter	Bruce Jay Friedman	Gene Wilder	Columbia Pictures	20	2022-05-10 15:32:48.300	2022-05-13 12:41:51.030
21	22	521	Cruising	February 15, 1980 (United States)	William Friedkin	William Friedkin	Al Pacino	Lorimar Film Entertainment	21	2022-05-10 15:32:48.303	2022-05-13 12:41:51.037
22	23	522	Heaven's Gate	April 24, 1981 (United States)	Michael Cimino	Michael Cimino	Kris Kristofferson	Parisian Productions	22	2022-05-10 15:32:48.303	2022-05-13 12:41:51.040
23	24	523	The Final Countdown	August 1, 1980 (United States)	Don Taylor	Thomas Hunter	Kirk Douglas	Byrna Productions	23	2022-05-10 15:32:48.303	2022-05-13 12:41:51.043
24	25	524	Xanadu	August 8, 1980 (United States)	Robert Greenwald	Richard Christian Darius	Olivia Newton-John	Universal Pictures	24	2022-05-10 15:32:48.303	2022-05-13 12:41:51.050
25	26	525	Urban Cowboy	June 6, 1980 (United States)	James Bridges	Aaron Latham	John Travolta	Paramount Pictures	25	2022-05-10 15:32:48.303	2022-05-13 12:41:51.053
26	27	526	Altered States	December 25, 1980 (United States)	Ken Russell	Paddy Chayefsky	William Hurt	Warner Bros.	26	2022-05-10 15:32:48.303	2022-05-13 12:41:51.057
27	28	527	Little Darlings	March 21, 1980 (United States)	Ron Maxwell	Kim Peck	Tatum O'Neal	Stephen Friedman/Kings Ros...	27	2022-05-10 15:32:48.307	2022-05-13 12:41:51.063

Query executed successfully.

DESKTOP-I2IVLMO (15.0 RTM) DESKTOP-I2IVLMO\Asus V... IT20126124_DW 00:00:00 7,668 rows

This Table have **7,668 rows**. AlternatemovieID, Name, released, director, writer, star, company, genreId, InsertDate, ModifiedDate

DimTopDistributors

SQLQuery17.sql -...sus VivoBook (51)*

```
select * from DimTopDistributors
```

DistributorsSK	AlternateRANK	DISTRIBUTORS	MOVIES	TOTAL_GROSS	InsertDate	ModifiedDate
1	1	Walt Disney	588	40472424278.00	2022-05-10 18:46:10.657	2022-05-13 12:42:36.443
2	2	Warner Bros.	824	36269425479.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.443
3	3	Sony Pictures	747	29113002302.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.443
4	4	Universal	535	28089932569.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.443
5	5	20th Century Fox	525	25857839756.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.447
6	6	Paramount Pictures	493	24361425304.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.447
7	7	Lionsgate	426	9631837781.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.447
8	8	New Line	209	6195268024.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.447
9	9	Dreamworks SKG	77	4278649271.00	2022-05-10 18:46:10.660	2022-05-13 12:42:36.447
10	10	Miramax	385	3836019208.00	2022-05-10 18:46:10.663	2022-05-13 12:42:36.447

Query executed successfully.

DESKTOP-I2IVLMO (15.0 RTM) DESKTOP-I2IVLMO\Asus V... IT20126124_DW 00:00:00 10 rows

This Table have **10 rows**. DistributorsSK, AlternateRANK, DISTRIBUTORS, MOVIES, TOTAL_GROSS, InsertDate, ModifiedDate

FactCinema

SQLQuery17.sql - ...sus VivoBook (51))

```
select * from FactCinema
```

100 %

Results Messages

	CustomerID	movieID	date	RANKID	TicketID	total_sales	tickets_sold	ticket_price	ticket_use	capacity	InsertDate	ModifiedDate	accm_txn_create_time	accm_txn_complete_time	txn_process_time
1	2644	2	20180505	1	1001	3900000	26	150000	26	610.32861328125	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-15 00:00:00.000	NULL
2	18129	3	20180505	2	1002	3360000	42	80000	42	519.802001953125	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-16 00:00:00.000	28
3	15208	4	20180505	3	1003	2560000	32	80000	32	160	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-17 00:00:00.000	52
4	1613	5	20180505	4	1004	1200000	12	100000	12	108.991828918457	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-18 00:00:00.000	76
5	3777	6	20180505	5	1005	1200000	15	80000	15	89.9820022583008	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-19 00:00:00.000	100
6	7610	7	20180505	6	1006	1050000	7	150000	7	714.285705566406	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-20 00:00:00.000	124
7	665	8	20180505	7	1007	1020000	10	102000	10	130.039016723633	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-21 00:00:00.000	NULL
8	14829	9	20180505	8	1008	750000	5	150000	5	318.471343994141	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-22 00:00:00.000	172
9	5468	10	20180505	9	1009	750000	11	68182	11	1157.89477539063	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-23 00:00:00.000	196
10	4678	11	20180505	10	1010	600000	4	150000	4	258.064514160156	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-24 00:00:00.000	220
11	14073	12	20180505	NULL	1011	480000	6	80000	6	1363.63635253906	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-25 00:00:00.000	244
12	13384	13	20180505	NULL	1012	480000	4	120000	4	135.135131835938	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-26 00:00:00.000	NULL
13	15596	14	20180505	NULL	1013	400000	5	80000	5	943.396240234375	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-27 00:00:00.000	NULL
14	8902	15	20180505	NULL	1014	300000	2	150000	2	800	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-14 20:33:48.173	2022-05-28 00:00:00.000	NULL

Query executed successfully. DESKTOP-I2IVLMO (15.0 RTM) DESKTOP-I2IVLMO\Asus V... IT20126124_DW 00:00:00 10,004 rows

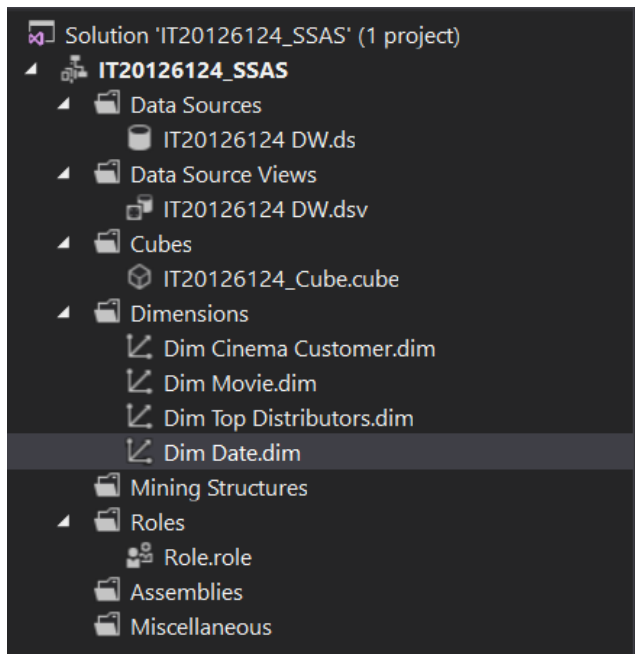
This table have **10,004 rows**. CustomerID

,movieID, date, RANKID, TicketID, total_sales, tickets_sold, ticket_price, ticket_use, capacity
, SrcDetailModifiedDate, InsertDate
, ModifiedDate, accm_txn_create_time, accm_txn_complete_time, txn_process_time_hours

Step 2: SSAS Cube implementation

Created a new Analysis Service Multidimensional and Data Mining Project called IT20126124_SSAS.

Then I have configured each option from top to bottom as shown below to create a data cube



I created a data source based on new connection.

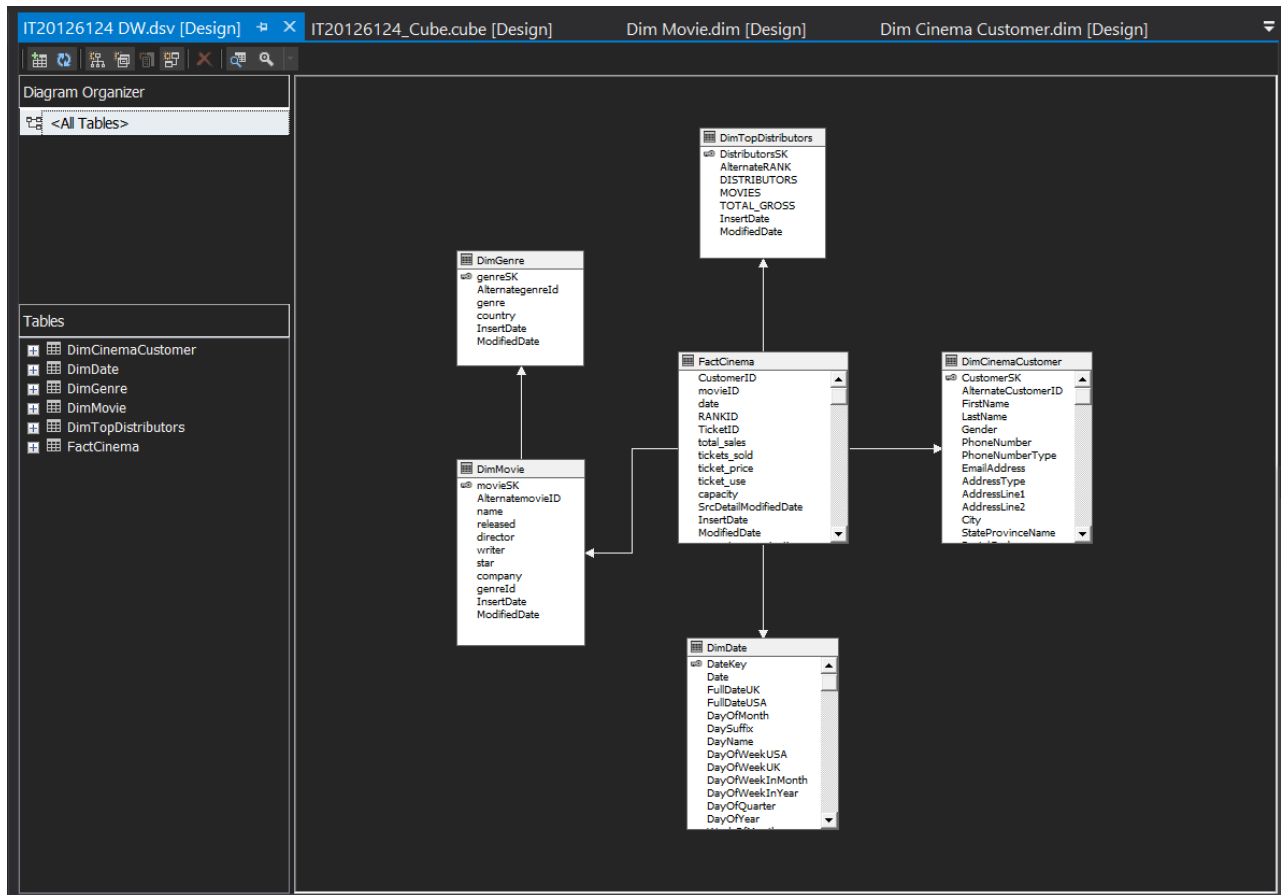
Once I completed the data source configuration, it created a new data source in solution explorer under data source.

- Creating data source view

Then I right clicked on data source views and select “New Data Source View”. Then in the welcome screen of the wizard, clicked “Next” to continue the configuration.

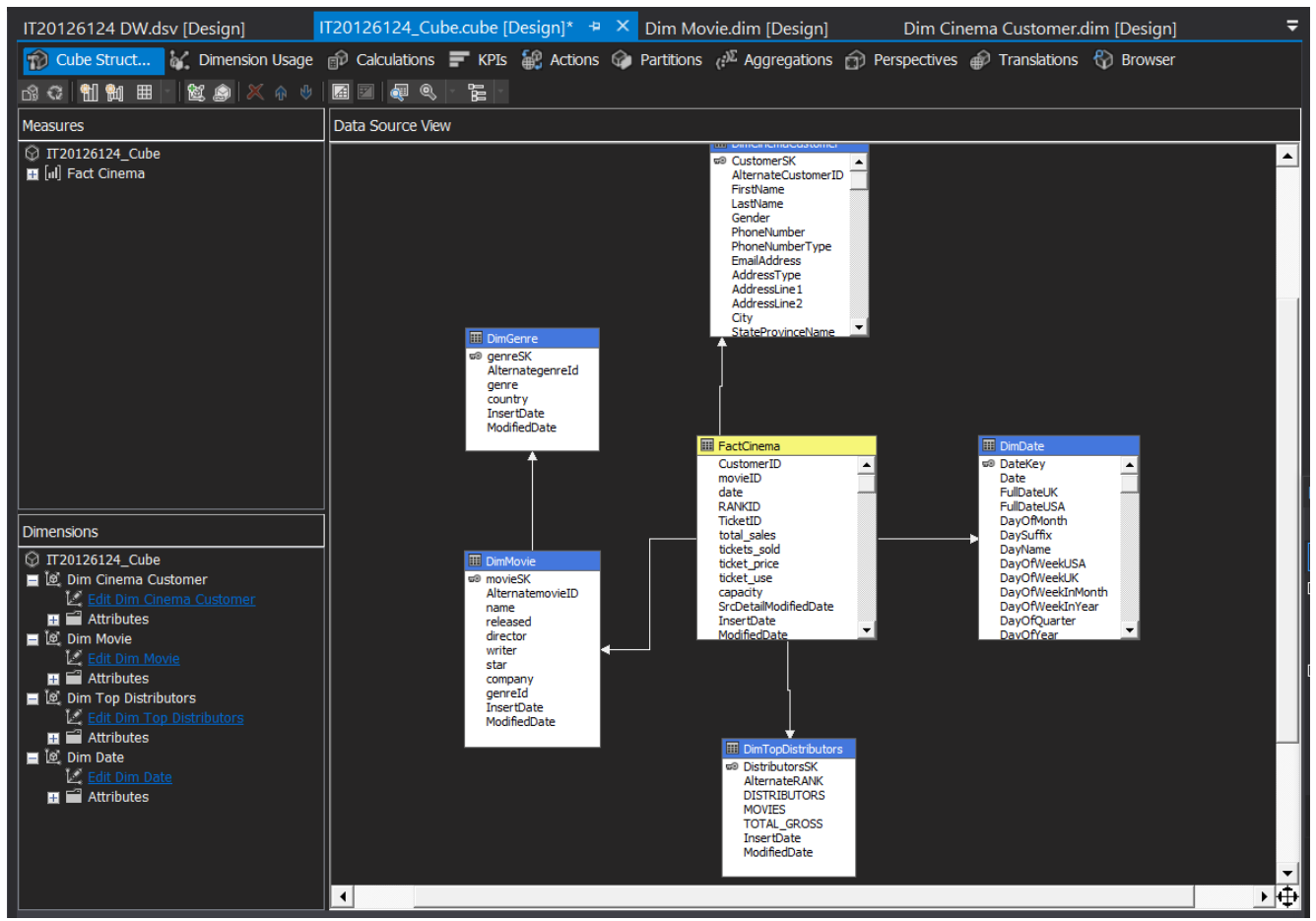
After that, I clicked on the “Add Related Tables” to automatically select and add the related dimension tables. It should automatically add FactCinema, DimCinemaCustomer, DimGenre, DimMovie, DimDate, DimTopDistributors dimensions to the list.

Once completed creating data source view, the newly created data source view as shown in the below screenshot.



- Creating a Data Cute

Once cube wizard configurations completed, it created a data cube as shown in the screenshot



Then I have configured each dimension are shown in the table view.

First, I configured the Dim Movie dimension

The Movie, Genre all have keys as the displayed values in this cube.

This hierarchy indicator is only a warning and will not prevent the cube from being deployed. It is only a saying no relationship can cause performance issues when using large dimensions with this hierarchy type

Dim Movie.dim [Design]* IT20126124_Cube.cube [Design]* IT20126124 DW.dsv [Design]

Dimension Struct... Attribute Relationships Translations Browser

Attributes

- Dim Movie
 - Alternategenre Id
 - Alternatemovie ID
 - Company
 - Country
 - Director
 - Genre
 - Genre Id
 - Genre SK
 - Movie SK
 - Name
 - Released
 - Star
 - Writer

Hierarchies

Hierarchy To create a new hierarchy, drag an attribute here.

- Name
- Genre
- <new level>

Data Source View

DimGenre

- genreSK
- AlternategenreId
- genre
- country
- InsertDate
- ModifiedDate

DimMovie

- movieSK
- AlternatemovieID
- name
- released
- director
- writer
- star
- company
- genreId
- InsertDate
- ModifiedDate

Dim Movie.dim [Design]* IT20126124_Cube.cube [Design]* IT20126124 DW.dsv [Design]

Dimension Struct... Attribute Relationships Translations Browser

Movie SK **Name**

Genre

Attributes

Alternategenre Id	Genre SK
Alternatemovie ID	Movie SK
Company	Name
Country	Released
Director	Star
Genre	Writer
Genre Id	

Attribute Relationships

Movie SK	⇒	Alternategenre Id	Movie SK	⇒	Genre SK
Movie SK	⇒	Alternatemovie ...	Movie SK	⇒	Name
Movie SK	⇒	Company	Movie SK	⇒	Released
Movie SK	⇒	Country	Movie SK	⇒	Star
Movie SK	⇒	Director	Movie SK	⇒	Writer
Movie SK	⇒	Genre			
Movie SK	⇒	Genre Id			

(Movie Hierarchy)

Hierarchies are useful in visual reporting tools to show the parent/child relationship between attributes. So, I have Created another hierarchy called Address hierarchy.

The screenshot displays the SQL Server Data Tools (SSDT) interface for the 'Dim Cinema Customer' dimension. The top pane shows the 'Hierarchies' tab with a new hierarchy named 'Address Hierarchy' containing levels: Country Region Group, State Province Name, City, and Postal Code. The bottom pane shows the 'Attribute Relationships' tab with a diagram where 'Customer SK' is the primary key, and 'Country Region Group', 'Postal Code', 'State Province Name', and 'City' are foreign keys. Below the diagram, the 'Attributes' list includes Address Line1, Address Line2, Address Type, Alternate Customer ID, City, Country Region Group, Customer SK, Email Address, End Date, First Name, Gender, Insert Date, Last Name, Modified Date, Phone Number, Phone Number Type, Postal Code, Start Date, and State Province Name. The 'Attribute Relationships' table lists the relationships between 'Customer SK' and various attributes.

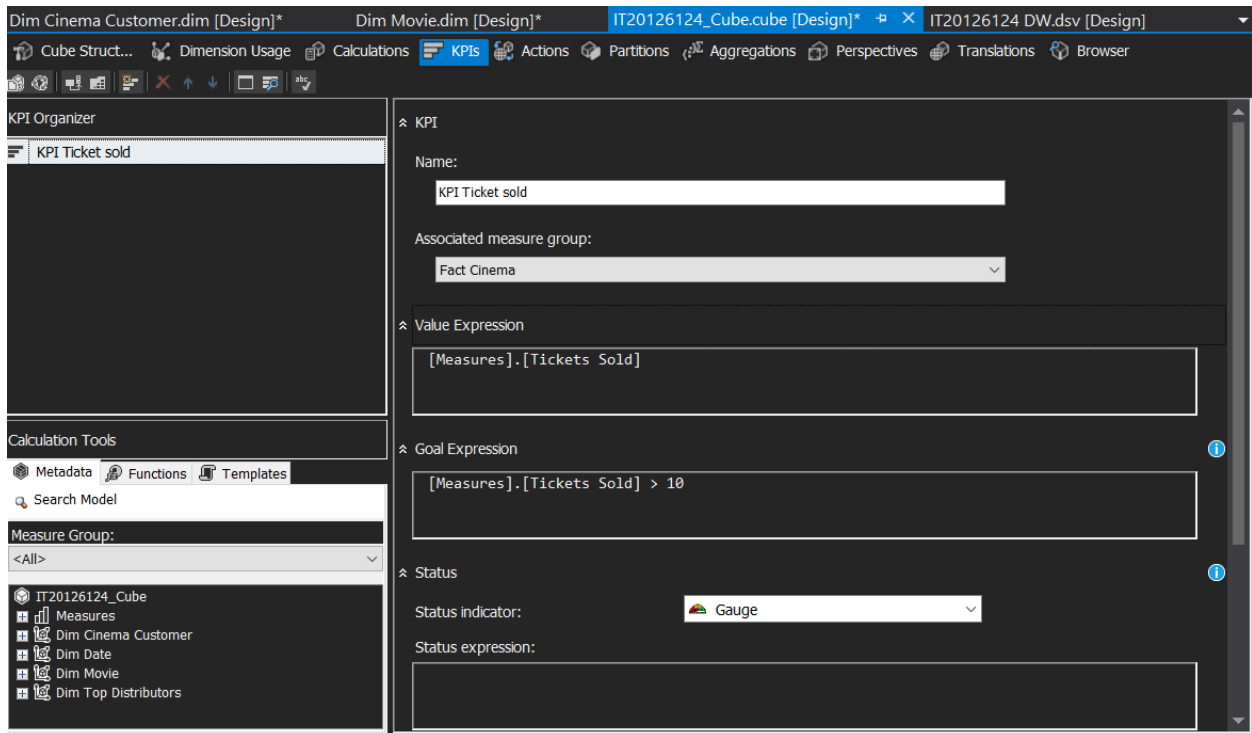
Attribute	Relationship
Customer SK	Address Line1
Customer SK	Address Line2
Customer SK	Address Type
Customer SK	Alternate Customer ...
Customer SK	City
Customer SK	Country Region Gr...
Customer SK	Email Address
Customer SK	End Date
Customer SK	First Name
Customer SK	Gender
Customer SK	Insert Date
Customer SK	Last Name
Customer SK	Modified Date
Customer SK	Phone Number

(Address hierarchy)

Creating a KPI's

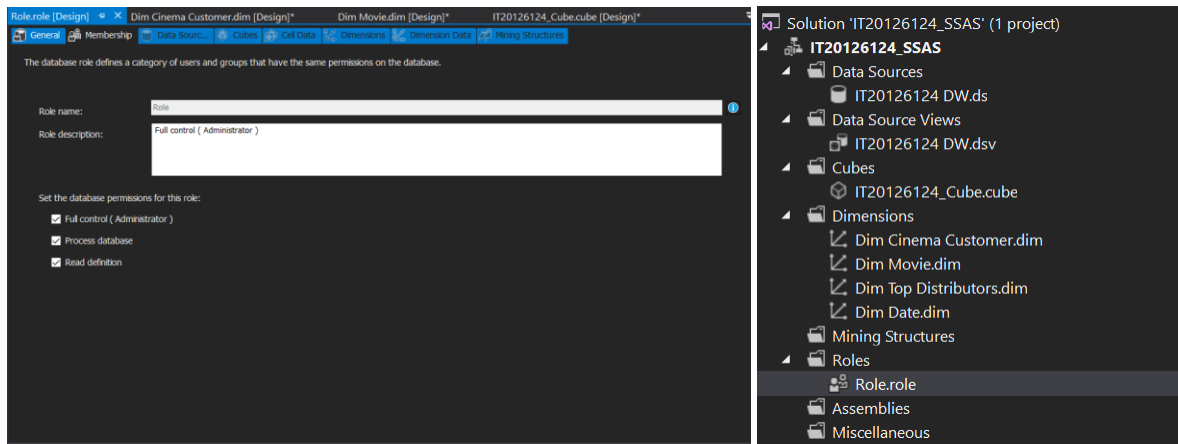
Then I have created a KPI's based on my business requirement

- Create the KPI.Name the KPI as **"KPI Ticket sold"**.
- Then select "Fact Cinema" as the Associated Measure Group. In the Measure Group on the lower left side panel,expand Measures and the expand "Fact Cinema". Drag and drop 'Tickets Sold' attribute to Global Expression area and modify the expression as flows:
[Measures].[Tickets Sold] > 10
- Then I save the all the changes. After processing the cube, we can see like this.

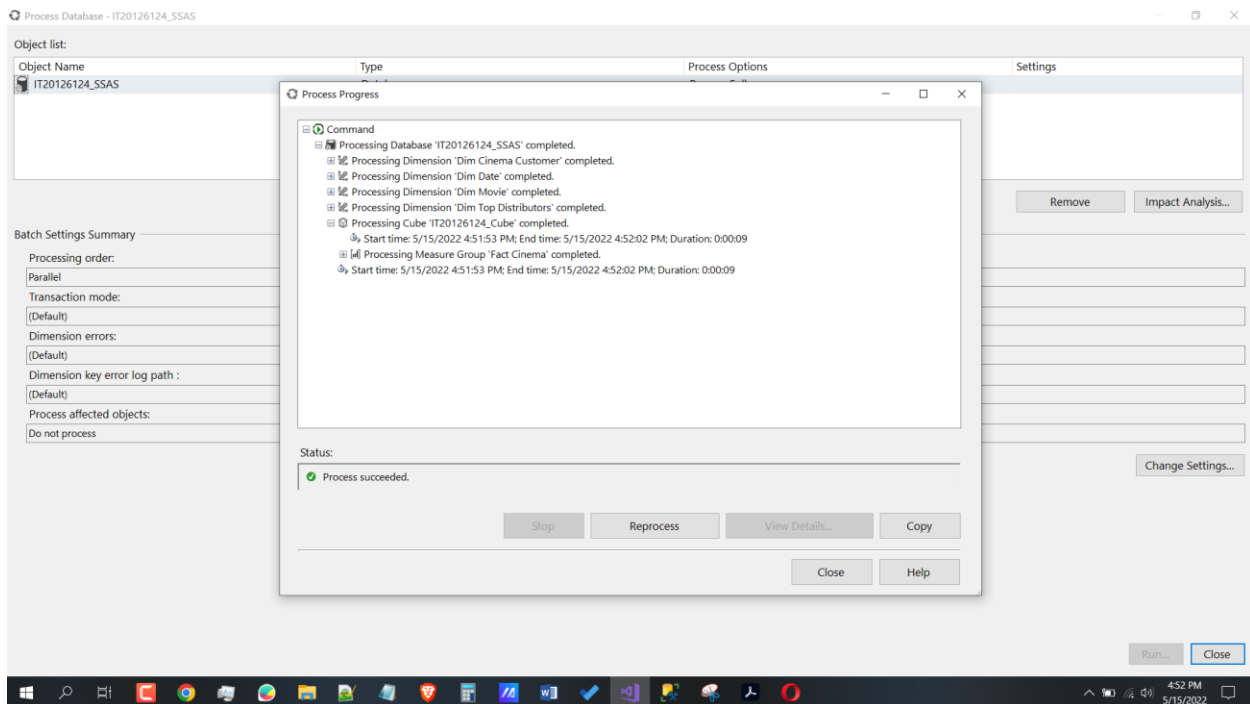


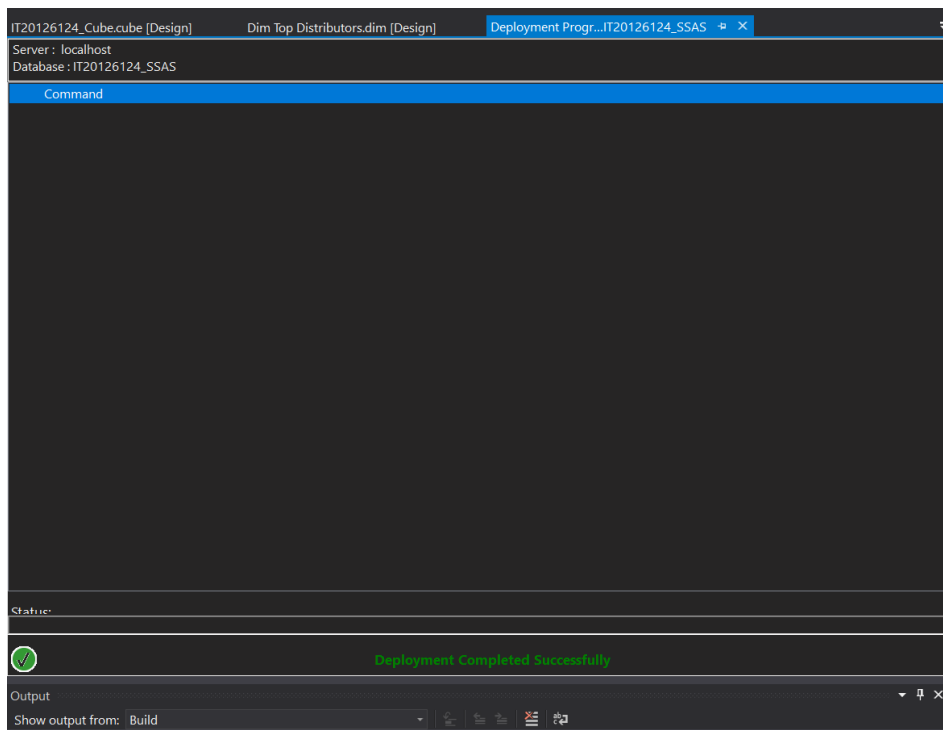
KPI Ticket sold

Then I have created one **user Role** and provide permissions to access to the data cube.

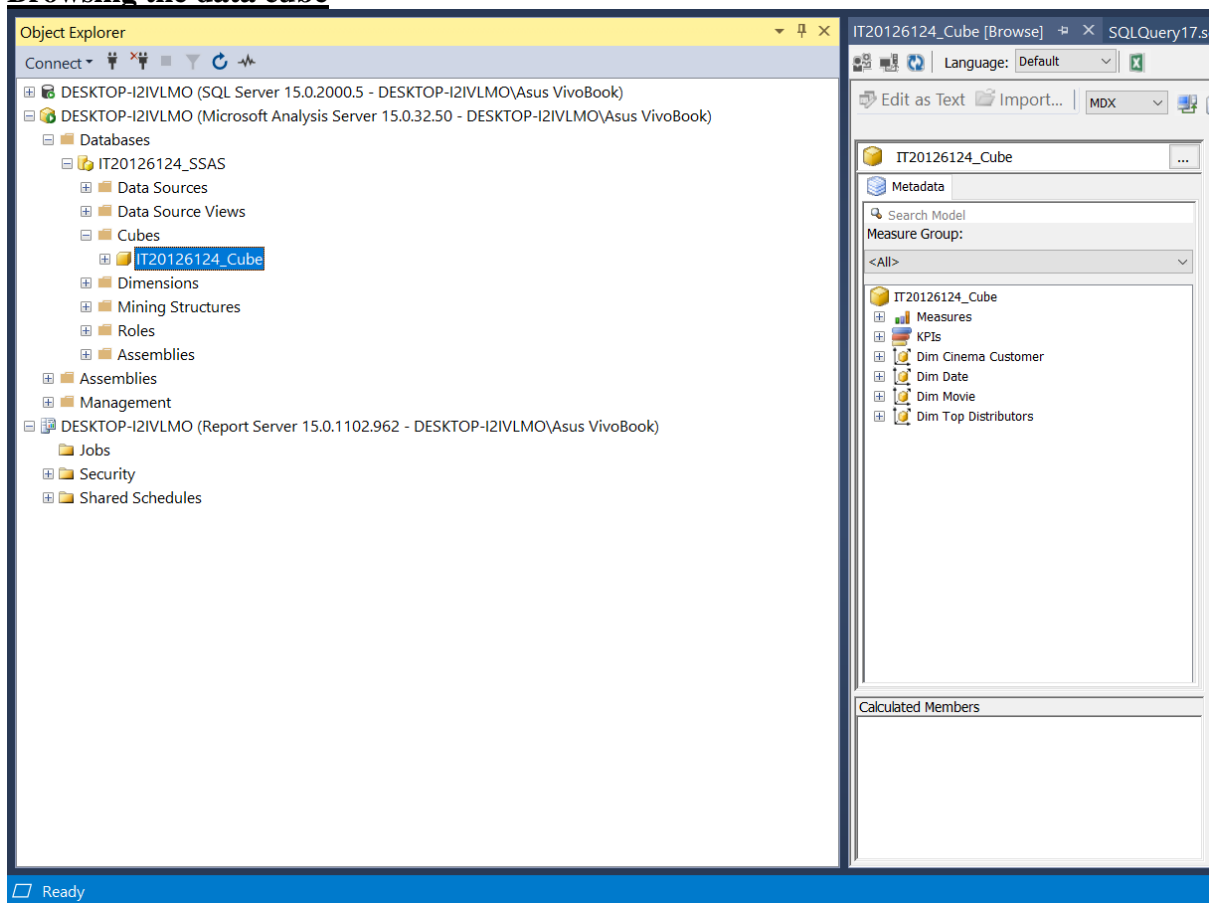


Finally, I have Deployed the project, I got the deployment is successful message as shown below.





Browsing the data cube



Name	Released	Star	Writer	Genre	KPI Ticket sold Value	KPI Ticket sold C
13 Assassins	September 25, 2010 (Japan)	KÅ'ji Yakusho	Kaneo Ikegami	Action	9	False
13 Going on 30	April 23, 2004 (United States)	Jennifer Garner	Josh Goldsmith	Comedy	24	True
13 Hours	January 15, 2016 (United States)	John Krasinski	Chuck Hogan	Action	13	True
1492: Conquest of P...	October 9, 1992 (United States)	GÅrard Depardieu	Rose Bosch	Adventure	33	True
15 Minutes	March 9, 2001 (United States)	Robert De Niro	John Herzfeld	Action	590	True
16 Blocks	March 3, 2006 (United States)	Bruce Willis	Richard Wenk	Action	20	True
17 Again	April 17, 2009 (United States)	Zac Efron	Jason Filardi	Comedy	30	True
18 Again!	April 8, 1988 (United States)	Charlie Schlatter	Josh Goldstein	Comedy	7	False
2 Days in the Valley	September 27, 1996 (United States)	Teri Hatcher	John Herzfeld	Comedy	17	True
2 Fast 2 Furious	June 6, 2003 (United States)	Paul Walker	Gary Scott Thompson	Action	1298	True
2 Guns	August 2, 2013 (United States)	Denzel Washington	Blake Masters	Action	6	False
200 Cigarettes	February 26, 1999 (United States)	Ben Affleck	Shana Larsen	Comedy	15	True
2010: the Year We ...	December 7, 1984 (United States)	Roy Scheider	Arthur C. Clarke	Adventure	28	True
20th Century Women	January 20, 2017 (United States)	Annette Bening	Mike Mills	Comedy	8	False
21 & Over	March 1, 2013 (United States)	Miles Teller	Jon Lucas	Comedy	20	True
21 Grams	January 16, 2004 (United States)	Sean Penn	Guillermo Arriaga	Crime	5	False
21 Jump Street	March 16, 2012 (United States)	Jonah Hill	Michael Bacall	Action	34	True
22 Jump Street	June 13, 2014 (United States)	Channing Tatum	Michael Bacall	Action	550	True
24 Hour Party People	September 20, 2002 (United States)	Steve Coogan	Frank Cottrell Boyce	Biography	26	True
25th Hour	January 10, 2003 (United States)	Edward Norton	David Benioff	Drama	255	True
27 Dresses	January 18, 2008 (United States)	Katherine Heigl	Aline Brosh McKenna	Comedy	135	True
28 Days	April 14, 2000 (United States)	Sandra Bullock	Susannah Grant	Comedy	205	True
28 Days Later...	June 27, 2003 (United States)	Cillian Murphy	Alex Garland	Drama	143	True
28 Hotel Rooms	November 9, 2012 (United States)	Marin Ireland	Matt Ross	Drama	103	True

Step 3: Demonstration of OLAP operations

Create an Excel report using MDX query

Using the power pivot, Power Query, Power view in excel allow us to create a semantic layer inside excel.

To connect the excel workbook and to get the data to the semantic layer we use MDX query.

I dragged and dropped Movie name, released, movie star, writer, genre, KPI ticket sold, KPI ticket sold goal. Additionally, I had added 'genre' from 'Dim genre as a filter into the section above the data grid as shown below

After that the data grid as displayed as below.

IT20126124_Cube [Browse] X

Language: Default

Edit as Text Import... MDX

IT20126124_Cube

Metadata

Search Model

Measure Group:

<All>

Measures

Fact Cinema

KPIs

KPI Ticket sold

Value

Goal

Dim Cinema Customer

Dim Date

Dim Movie

Alternategenre Id

Alternatemovie Id

Company

Country

Director

Genre

Genre Id

Genre SK

Movie SK

Name

Released

Calculated Members

Dimension	Hierarchy	Operator	Filter Expression	Parameters
Dim Movie	Genre	Equal		<input type="checkbox"/> <input type="checkbox"/>
<Select dimension>				

Name	Released	Star	Writer	Genre	KPI Ticket sold Value	KPI Ticket sold C
13 Assassins	September 25, 2010 (Japan)	KÅ'ji Yakusho	Kaneo Ikegami	Action	9	False
13 Going on 30	April 23, 2004 (United States)	Jennifer Garner	Josh Goldsmith	Comedy	24	True
13 Hours	January 15, 2016 (United States)	John Krasinski	Chuck Hogan	Action	13	True
1492: Conquest of P...	October 9, 1992 (United States)	GÅrard Depardieu	Rose Bosch	Adventure	33	True
15 Minutes	March 9, 2001 (United States)	Robert De Niro	John Herzfeld	Action	590	True
16 Blocks	March 3, 2006 (United States)	Bruce Willis	Richard Wenk	Action	20	True
17 Again	April 17, 2009 (United States)	Zac Efron	Jason Filardi	Comedy	30	True
18 Again!	April 8, 1988 (United States)	Charlie Schlatter	Josh Goldstein	Comedy	7	False
2 Days in the Valley	September 27, 1996 (United States)	Teri Hatcher	John Herzfeld	Comedy	17	True
2 Fast 2 Furious	June 6, 2003 (United States)	Paul Walker	Gary Scott Thompson	Action	1298	True
2 Guns	August 2, 2013 (United States)	Denzel Washington	Blake Masters	Action	6	False
200 Cigarettes	February 26, 1999 (United States)	Ben Affleck	Shana Larsen	Comedy	15	True
2010: the Year We ...	December 7, 1984 (United States)	Roy Scheider	Arthur C. Clarke	Adventure	28	True
20th Century Women	January 20, 2017 (United States)	Annette Bening	Mike Mills	Comedy	8	False
21 & Over	March 1, 2013 (United States)	Miles Teller	Jon Lucas	Comedy	20	True
21 Grams	January 16, 2004 (United States)	Sean Penn	Guillermo Arriaga	Crime	5	False
21 Jump Street	March 16, 2012 (United States)	Jonah Hill	Michael Bacall	Action	34	True
22 Jump Street	June 13, 2014 (United States)	Channing Tatum	Michael Bacall	Action	550	True
24 Hour Party People	September 20, 2002 (United States)	Steve Coogan	Frank Cottrell Boyce	Biography	26	True
25th Hour	January 10, 2003 (United States)	Edward Norton	David Benioff	Drama	255	True
27 Dresses	January 18, 2008 (United States)	Katherine Heigl	Aine Brosh McKenna	Comedy	135	True
28 Days	April 14, 2000 (United States)	Sandra Bullock	Susannah Grant	Comedy	205	True
28 Days Later...	June 27, 2003 (United States)	Cillian Murphy	Alex Garland	Drama	143	True
28 Hotel Rooms	November 9, 2012 (United States)	Marin Ireland	Matt Ross	Drama	103	True

Then I clicked on the Design Mode button to view the MDX query of the configuration and Then I have used this query in an Excel sheet to generate a report through Excel.

IT20126124_Cube [Browse] X SQLQuery17.sql ...sus VivoBook (51) X

Language: Default

Edit as Text Import... MDX

IT20126124_Cube

Metadata

Search Model

Measure Group:

<All>

Measures

Fact Cinema

KPIs

Dim Cinema Customer

Dim Date

Dim Movie

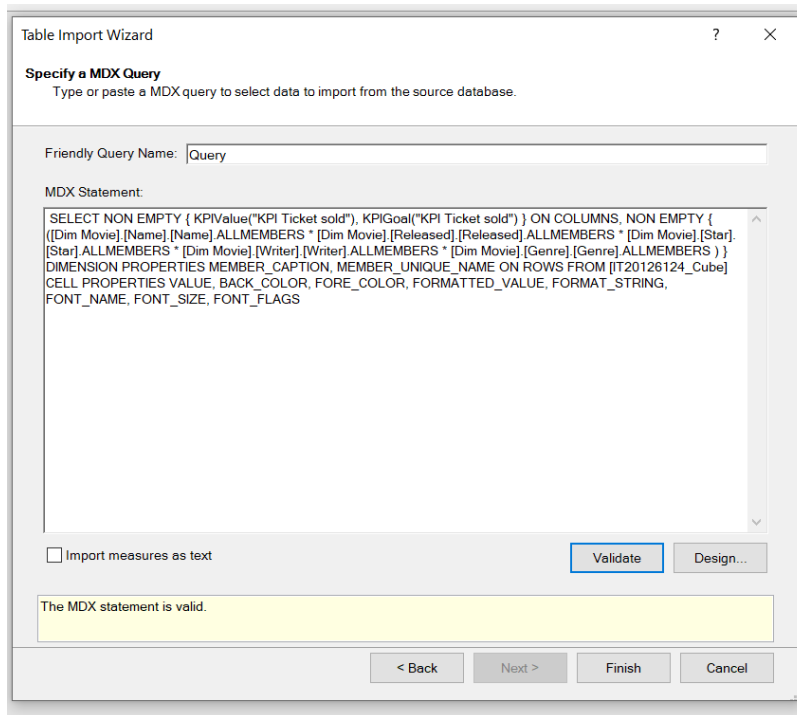
Dim Top Distributors

```
SELECT NON EMPTY ( KPIValue("KPI Ticket sold"), KPIGoal("KPI Ticket sold") ) ON COLUMNS, NON EMPTY ( ([Dim Movie].[Name].[Name].ALLMEMBERS * [Dim Movie].[Released].[Released].ALLMEMBERS * [Dim Movie].[Star].[Star].ALLMEMBERS * [Dim Movie].[Writer].[Writer].ALLMEMBERS * [Dim Movie].[Genre].[Genre].ALLMEMBERS ) ) DIMENSION PROPERTIES MEMBER_CAPTION, MEMBER_UNIQUE_NAME ON ROWS FROM [IT20126124_Cube] CELL PROPERTIES VALUE, BACK_COLOR, FORE_COLOR, FORMATTED_VALUE, FORMAT_STRING, FONT_NAME, FONT_SIZE, FONT_FLAGS
```

Name	Released	Star	Writer	Genre	Tickets Sold	KPI Ticket sold Goal
2010: the Year We Make Contact	December 7, 1984 (United States)	Roy Scheider	Arthur C. Clarke	Adventure	28	True
20th Century Women	January 20, 2017 (United States)	Annette Bening	Mike Mills	Comedy	8	False
21 & Over	March 1, 2013 (United States)	Miles Teller	Jon Lucas	Comedy	20	True
21 Grams	January 16, 2004 (United States)	Sean Penn	Guillermo Arriaga	Crime	5	False
21 Jump Street	March 16, 2012 (United States)	Jonah Hill	Michael Bacall	Action	34	True
22 Jump Street	June 13, 2014 (United States)	Channing Tatum	Michael Bacall	Action	550	True
24 Hour Party People	September 20, 2002 (United States)	Steve Coogan	Frank Cottrell Boyce	Biography	26	True
25th Hour	January 10, 2003 (United States)	Edward Norton	David Benioff	Drama	255	True
27 Dresses	January 18, 2008 (United States)	Katherine Heigl	Aine Brosh McKenna	Comedy	135	True
28 Days	April 14, 2000 (United States)	Sandra Bullock	Susannah Grant	Comedy	205	True
28 Days Later...	June 27, 2003 (United States)	Cillian Murphy	Alex Garland	Drama	143	True
28 Hotel Rooms	November 9, 2012 (United States)	Marin Ireland	Matt Ross	Drama	103	True
28 Weeks Later	May 11, 2007 (United States)	Jeremy Renner	Rowan Joffe	Horror	93	True
29th Street	November 1, 1991 (United States)	Anthony LaPaglia	Frank Pesce	Comedy	77	True
3 Days to Kill	February 21, 2014 (United States)	Kevin Costner	Adi Hasak	Action	34	True
3 Idiots	December 25, 2009 (India)	Aamir Khan	Rajkumar Hirani	Comedy	78	True
3 Ninjas	August 7, 1992 (United States)	Victor Wong	Kenny Kim	Action	4	False
3 Ninjas Kick Back	May 6, 1994 (United States)	Victor Wong	Sang-ok Shin	Action	16	True

Connecting Excel to SSAS Cube using an MDX Query

After pasting the generated query, clicked on validate to make sure the query does not contain any errors.



The image shows the 'Table Import Wizard' dialog box, specifically the 'Specify a MDX Query' step. The 'Friendly Query Name' is 'Query'. The 'MDX Statement' text area contains a complex MDX query. Below the text area, there is a checkbox for 'Import measures as text' which is unchecked. To the right of the checkbox are 'Validate' and 'Design...' buttons. Below these buttons, a yellow status bar indicates 'The MDX statement is valid.' At the bottom of the dialog are '< Back', 'Next >', 'Finish', and 'Cancel' buttons.

Table Import Wizard

Specify a MDX Query
Type or paste a MDX query to select data to import from the source database.

Friendly Query Name: Query

MDX Statement:

```
SELECT NON EMPTY { KPIValue("KPI Ticket sold"), KPIGoal("KPI Ticket sold") } ON COLUMNS, NON EMPTY { ([Dim Movie] [Name] [Name] ALLMEMBERS * [Dim Movie] [Released] [Released] ALLMEMBERS * [Dim Movie] [Star] [Star] ALLMEMBERS * [Dim Movie] [Writer] [Writer] ALLMEMBERS * [Dim Movie] [Genre] [Genre] ALLMEMBERS ) } DIMENSION PROPERTIES MEMBER_CAPTION, MEMBER_UNIQUE_NAME ON ROWS FROM [IT20126124_Cube] CELL PROPERTIES VALUE, BACK_COLOR, FORE_COLOR, FORMATTED_VALUE, FORMAT_STRING, FONT_NAME, FONT_SIZE, FONT_FLAGS
```

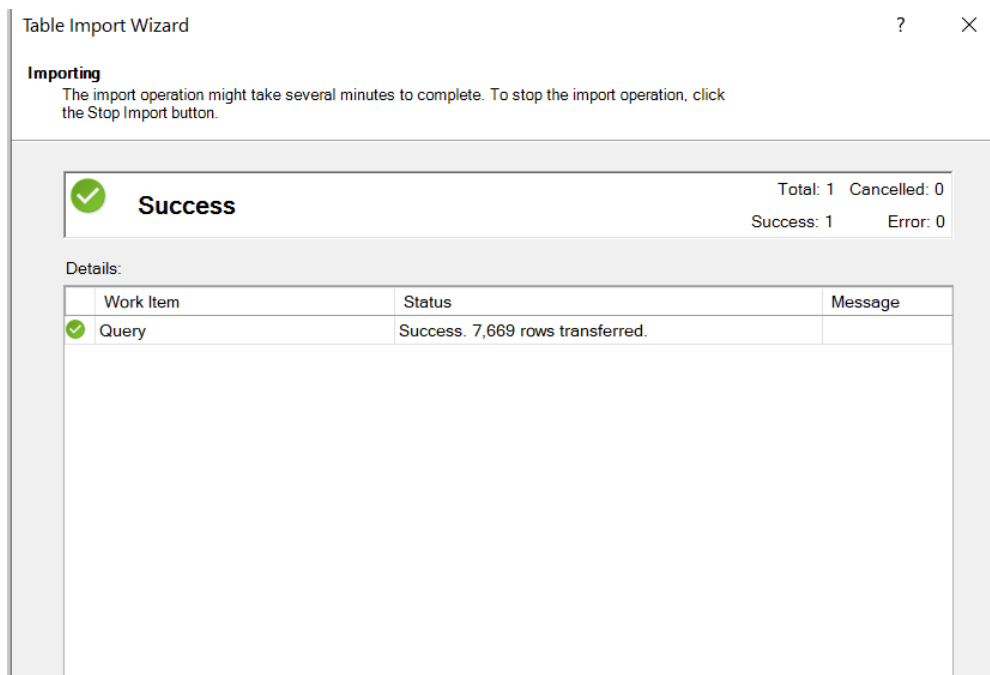
☐ Import measures as text

Validate Design...

The MDX statement is valid.

< Back Next > Finish Cancel


Then I have clicked on finish to extract the data the cube.




The image shows the 'Table Import Wizard' dialog box, specifically the 'Importing' step. It displays a success message with a green checkmark icon. The status summary shows 'Total: 1', 'Cancelled: 0', 'Success: 1', and 'Error: 0'. Below this, a 'Details' section contains a table with one row: 'Query' with status 'Success. 7,669 rows transferred.'.

Table Import Wizard

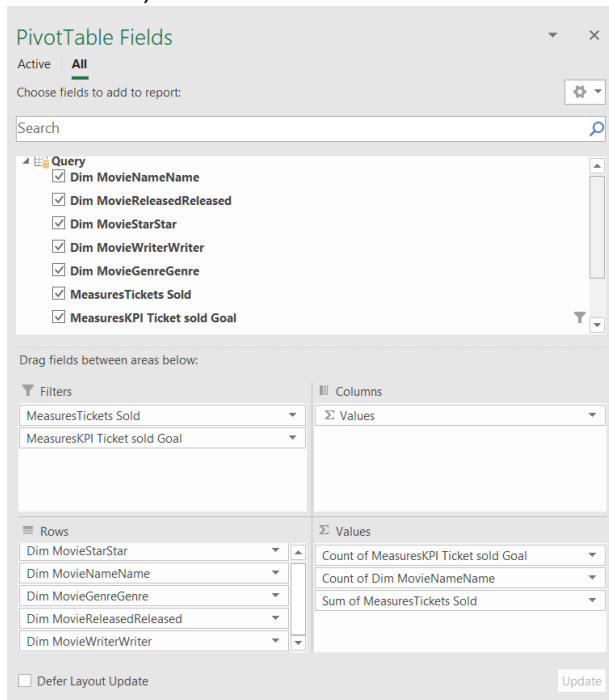
Importing
The import operation might take several minutes to complete. To stop the import operation, click the Stop Import button.

 **Success** Total: 1 Cancelled: 0
Success: 1 Error: 0

Details:

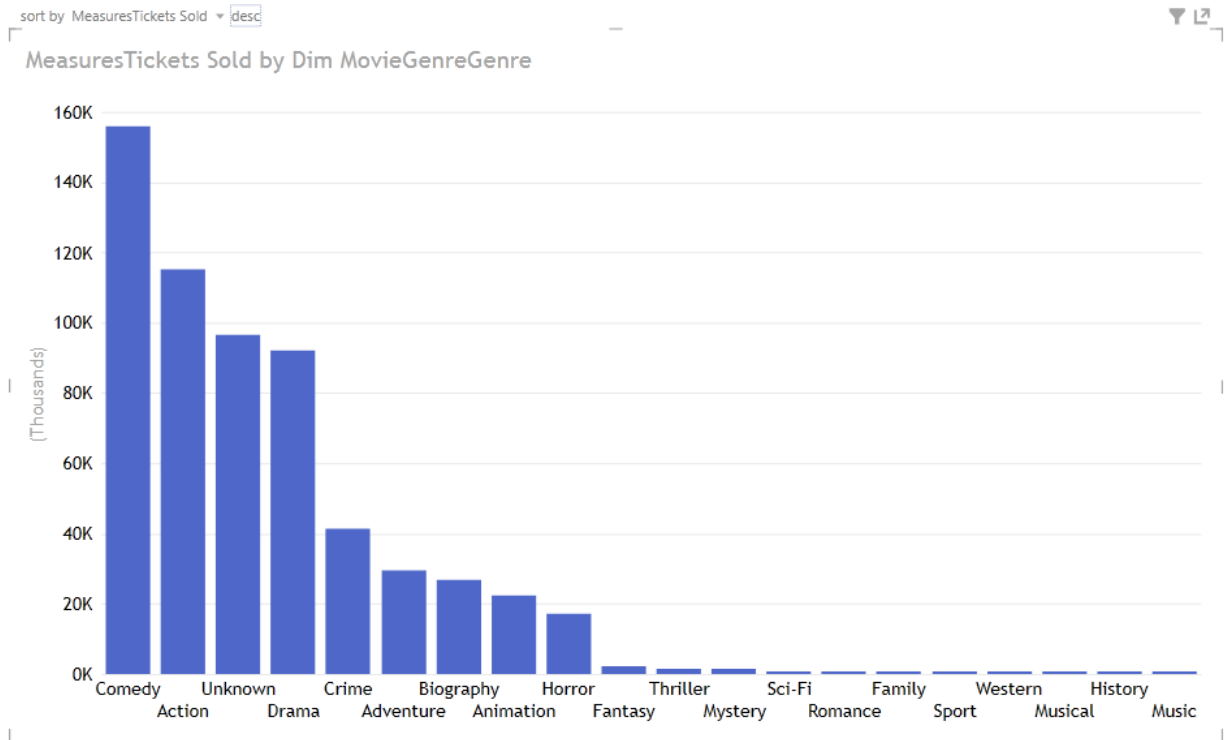
Work Item	Status	Message
 Query	Success. 7,669 rows transferred.	

In the Excel, I can see all the fields I selected via the MDX Query.



- **Pivot**

In the below pivot table, I have statically summarized the data of a more extensive Movie table. This summary includes number of ticket sales in a descriptive manner in a Genre wise. And using this pivot table we can visualize our data by giving them a different perspective and view. We can rotate the axis of the dimension and see different pattern of the same data.



- **Slice**

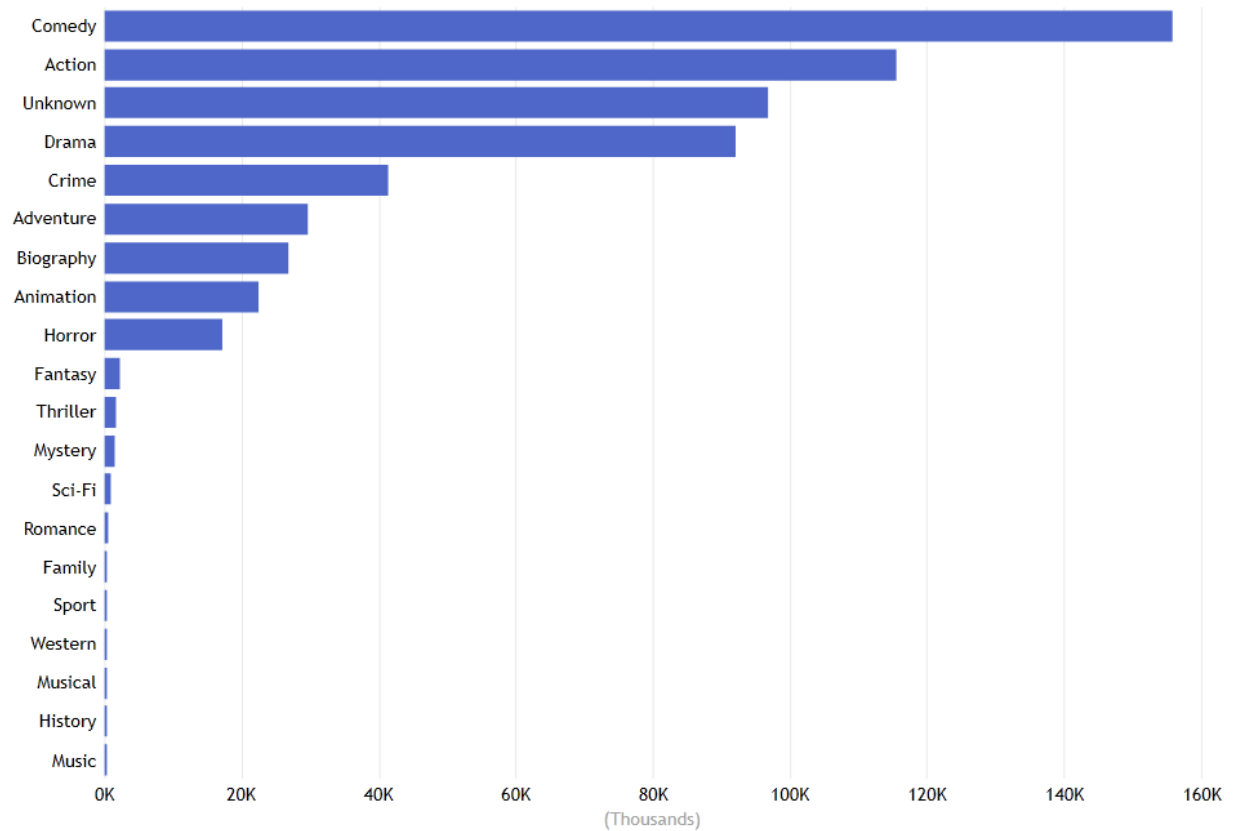
Slice is a rectangular subset of a cube, by choosing a single value for one of its dimensions.

So here I have used a slice to filter data in table and graph by Genre wise. So, this blue colored area displays the Total number of ticket sales in a descriptive manner in a Genre wise. Likewise, we can view total number of ticket sales of each genre (Comedy, Action, Animation, , Drama, Animation, etc.)

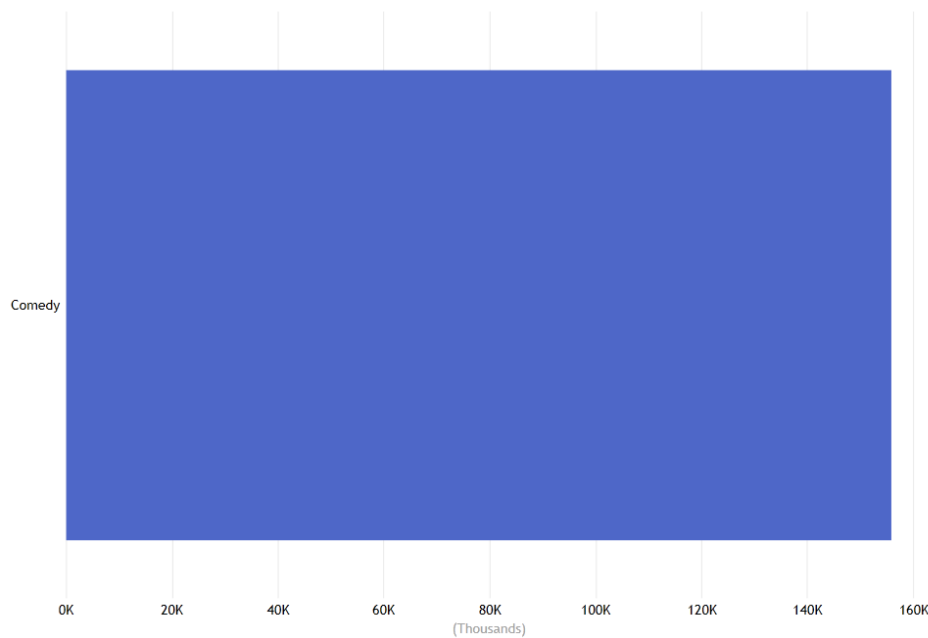
sort by MeasuresTickets Sold ▾ desc



MeasuresTickets Sold by Dim MovieGenreGenre



MeasuresTickets Sold by Dim MovieGenreGenre



(filtered according to the total number of ticket sales in comedy genre)

Filters



VIEW | CHART

Dim MovieGenreGenre
is Comedy



Search...

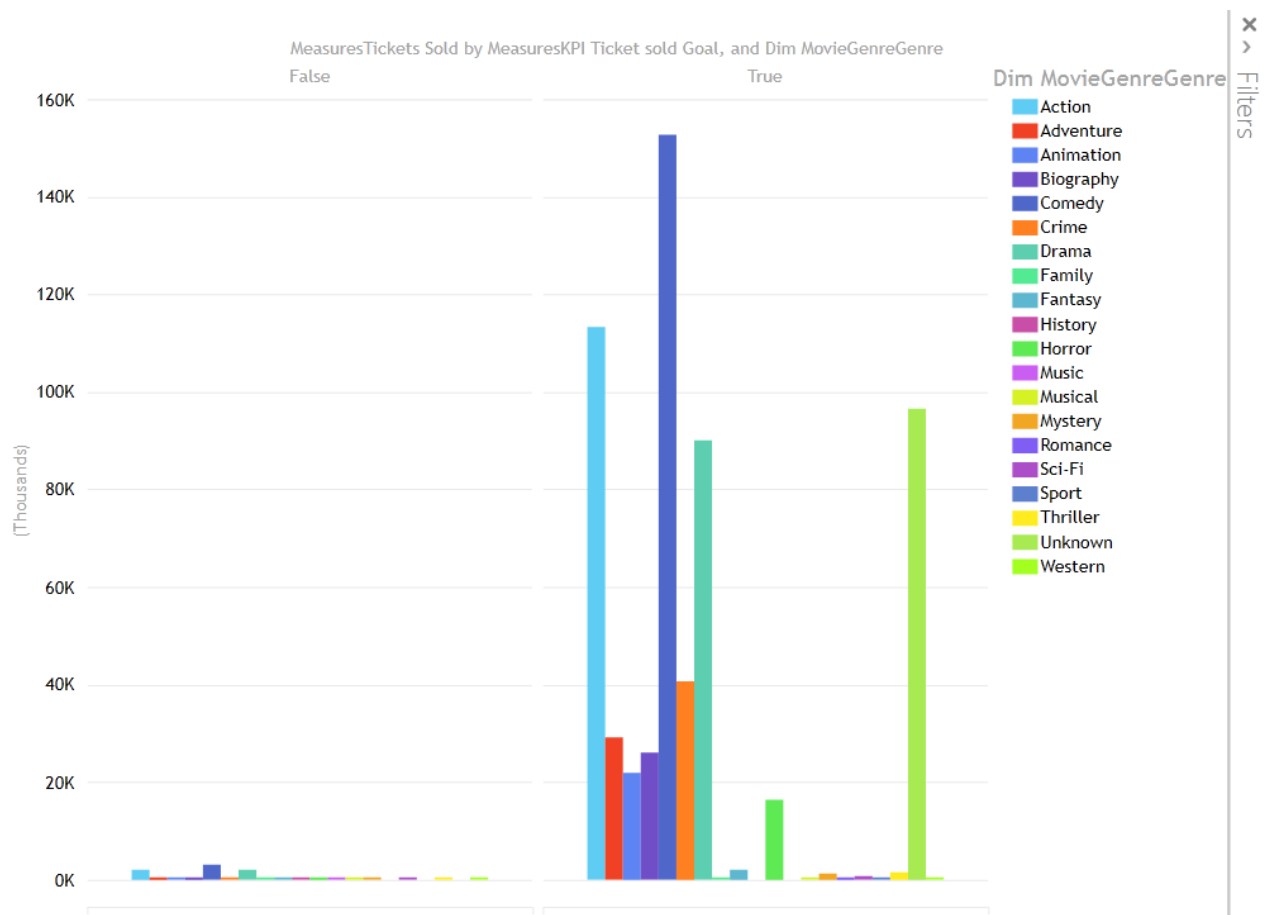


- ☒ (All) 1705
- ☐ Action 427
- ☐ Adventure 338
- ☐ Animation 443
- ☐ Biography 2245
- ☒ Comedy 551
- ☐ Crime 1518
- ☐ Drama 11
- ☐ Family 44
- ☐ Fantasy 1
- ☐ History 322
- ☐ Horror 1
- ☐ Musical 2
- ☐ Mystery 20
- ☐ Romance 10
- ☐ Sci-Fi 10
- ☐ Sport 1
- ☐ Thriller 16
- ☐ Unknown 1
- ☐ Western 3

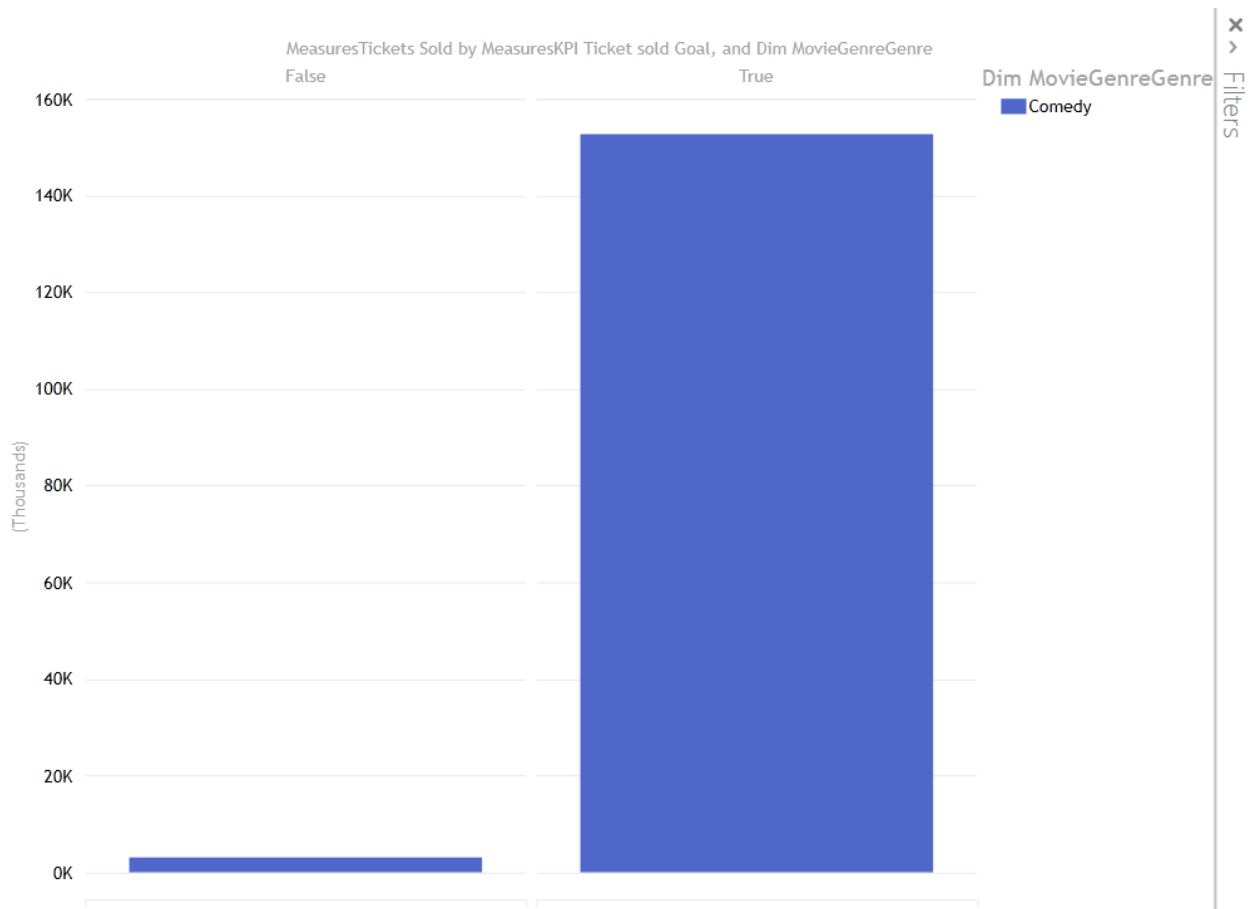
- **Dice**

Selects two or more dimensions from a given cube and provides new sub-cube by selecting specific values on those selected dimensions.

Therefore, this report shows Total number of ticket sales in a genre by ticket sales goal false or true.



As an instance in below figure, bar chart's highlighted area emphasizes all values of 2 different ticket sales goals in comedy genre.



- **Roll-up and drill-down**

In this roll up and drill down report rows can drill down movie to genre. So that report can view the ticket sales count .and the report can roll up from movie-to-genre type so we can view genre type ticket sales count.

- **Roll up**

Climbing up a hierarchy of the dimension to aggregate data means the roll up OLAP operation in cubes

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	A
1																													
2																													
3																													
4		Sum of Measures	Tickets Sold																										
5		Row Labels		Column Labels																									
6				False	True																								
7		The Business of Show Business																											
8		History																											
9		February 15, 1983 (Canada)																											
10		50 Cent																											
11		Get Rich or Die Tryin'																											
12		Biography																											
13		November 9, 2005 (United States)																											
14		A.J. Cook																											
15		Final Destination 2																											
16		Horror																											
17		January 31, 2003 (United States)																											
18		À%milie Dequenue																											
19		Rosetta																											
20		Drama																											
21		September 22, 1999 (Belgium)																											
22		Àlex Angulo																											
23		The Day of the Beast																											
24		Action																											
25		December 23, 1998 (United States)																											
26		Aaliyah																											
27		Queen of the Damned																											
28		Drama																											
29		February 22, 2002 (United States)																											
30		Aamir Khan																											
31		3 Idiots																											
32		Comedy																											
33		December 25, 2009 (India)																											
34		Dangal																											
35		Action																											
36		December 21, 2016 (United States)																											
		Power View17	Power View16	Power View15	Power View14	Sheet2	Sheet6																						

- Drill down

Stepping down a hierarchy of the dimension allowing navigation through details means the drill down OLAP operation in cube

I gather the movie name, genre, release date under movie star and gather the total number of ticket sales under each movie star and each movie name.

	A	B	C	D	E	F	G	H	I	J	K	L
1		Measures	Tickets Sold									
2		MeasuresKPI	Ticket sold Goal									
3												
4		Row Labels		Count of MeasuresKPI	Ticket sold Goal	Count of Dim MovieNameName	Sum of Tickets Sold					
5												
6		The Business of Show Business										
7		History										
8		February 15, 1983 (Canada)										
9		50 Cent										
10		Get Rich or Die Tryin'										
11		Biography										
12		November 9, 2005 (United States)										
13		A.J. Cook										
14		Final Destination 2										
15		Horror										
16		January 31, 2003 (United States)										
17		À%milie Dequenue										
18		Rosetta										
19		Drama										
20		September 22, 1999 (Belgium)										
21		Àlex Angulo										
22		The Day of the Beast										
23		Action										
24		December 23, 1998 (United States)										
25		Aaliyah										
26		Queen of the Damned										
27		Drama										
28		February 22, 2002 (United States)										
29		Aamir Khan										
30		3 Idiots										
31		Comedy										
32		December 25, 2009 (India)										
33		Dangal										
34		Action										
35		December 21, 2016 (United States)										
36		Dil Chahta Hai										
37		Comedy										
38		August 10, 2001 (India)										
39		Ghajini										
40		Action										
41		December 24, 2008 (United States)										
42		Lagaan: Once Upon a Time in India										
43												
		Sheet2	Power View17	Power View16	Power View15	Power View14						

Explore

Rosetta

Dim MovieWriterWriter

MeasuresTickets Sold

MeasuresKPI Ticket sold Go

Drill To

Dim MovieWriterWriter

PivotTable Fields

Active All

Choose fields to add to report:

Search

☒ Dim MovieNameName
☒ Dim MovieReleasedReleased
☒ Dim MovieStarStar
☐ Dim MovieWriterWriter
☒ Dim MovieGenreGenre
☒ MeasuresTickets Sold
☒ MeasuresKPI Ticket sold Goal

Drag fields between areas below:

Filters
 MeasuresTickets Sold
 MeasuresKPI Ticket s...

Columns
 Σ Values

Rows
 Dim MovieStarStar
 Dim MovieName...
 Dim MovieGenreG...
 Dim MovieRelease...

Σ Values
 Count of MeasuresKPI ...
 Count of Dim MovieN...
 Sum of Tickets Sold

☐ Defer Layout Update

Update

Step 4: SSRS Reports

SQL Server Reporting Services (SSRS) is a platform for creating, publishing, and managing mobile and paginated reports/dashboards, then delivering them to the right users in different ways, such as via a web browser, on their mobile device, or via email. Here I have mainly used **Report Builder** to create SSRS Reports because as a standalone application it will provide more freedom for users than using Report Design (SSDT) in visual studio.

I use Report Builder to create my reports.

- First step to create Data Source. In order to create the data source, I add my data source as “IT20126124_DW”.
- Next, I create the data set. In order to create the data, set right click on Dataset and open up Dataset properties window. In the query section, provide the dataset name as “Dataset1” and select use the data set embedded in my dataset.

Data source properties

```
SELECT

FactCinema.CustomerID,FactCinema.movieID,FactCinema.[date] AS [FactCinema
date],FactCinema.RANKID,FactCinema.TicketID,FactCinema.total_sales

,FactCinema.tickets_sold,FactCinema.ticket_price,FactCinema.ticket_use,FactCinema.capacity,DimTopDistribut
ors.DistributorsSK,DimTopDistributors.AlternateRANK,DimTopDistributors.DISTRIBUTORS

,DimTopDistributors.MOVIES,DimTopDistributors.TOTAL_GROSS,DimMovie.movieSK,DimMovie.AlternatemovieID,DimMo
vie.name,DimMovie.released,DimMovie.director

,DimMovie.writer,DimMovie.star,DimMovie.company,DimMovie.genreId,DimGenre.genreSK,DimGenre.AlternategenreI
d,DimGenre.genr,DimGenre.country

,DimCinemaCustomer.CustomerSK,DimCinemaCustomer.AlternateCustomerID,DimCinemaCustomer.FirstName,DimCinemaC
ustomer.LastName,DimCinemaCustomer.Gender''

,DimCinemaCustomer.PhoneNumber,DimCinemaCustomer.PhoneNumberType,DimCinemaCustomer.EmailAddress,DimCinemaC
ustomer.AddressType

,DimCinemaCustomer.AddressLine1,DimCinemaCustomer.AddressLine2,DimCinemaCustomer.City,DimCinemaCustomer.St
ateProvinceName

,DimCinemaCustomer.PostalCode,DimCinemaCustomer.CountryRegionGroup,DimDate.DateKey,DimDate.[Date] AS
[DimDate Date],DimDate.[Month],DimDate.[Year]

FROM

    FactCinema

    INNER JOIN DimDate

        ON FactCinema.[date] = DimDate.DateKey

    INNER JOIN DimCinemaCustomer
```



```

ON FactCinema.CustomerID = DimCinemaCustomer.CustomerSK
INNER JOIN DimTopDistributors
ON FactCinema.RANKID = DimTopDistributors.DistributorsSK
INNER JOIN DimMovie
ON FactCinema.movieID = DimMovie.movieSK
INNER JOIN DimGenre
ON DimMovie.genreId = DimGenre.genreSK

```

Execute the above query that I have create using SQL server. Then I click ok button to create the dataset.

- **Create the Matrix report.**

At the point of selecting fields for Row groups and Column groups, I drag and drop ‘star, ‘Total’ to Row groups section and ‘Genre’ to Column groups section and ‘Total’ to Values section and click Next. In Choose the layout page, select all the option and click Next. These options are to have totals for different levels/groups and to enable or disable the expand/collapse feature (essentially drill-down/roll-up) Click Finish. Now, you should be able to see a matrix inserted in to the report body. I provide a suitable report title such ‘Movie star wise ticket sales details

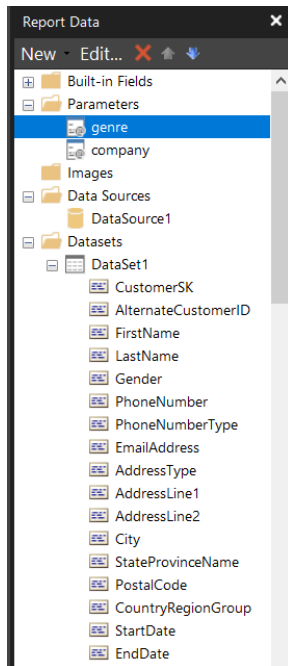
The screenshot shows the SSRS report viewer. The title 'Movie star wise ticket sales details' is highlighted in orange. The report is a matrix with 'star' as the row group and 'Genre' as the column group. The values represent ticket sales for each star across different genres.

star	Action	Adventure	Biography	Comedy	Drama	Horror	Total
Betsy Palmer						7	7
Brooke Shields		42					42
Chevy Chase				15			15
David Carradine			4				4
Gene Hackman	11						11
Jack Nicholson					26		26
John Belushi	10						10
Mark Hamill	32						32
Robert De Niro			5				5
Robert Hays				12			12
Total	53	42	9	27	26	7	

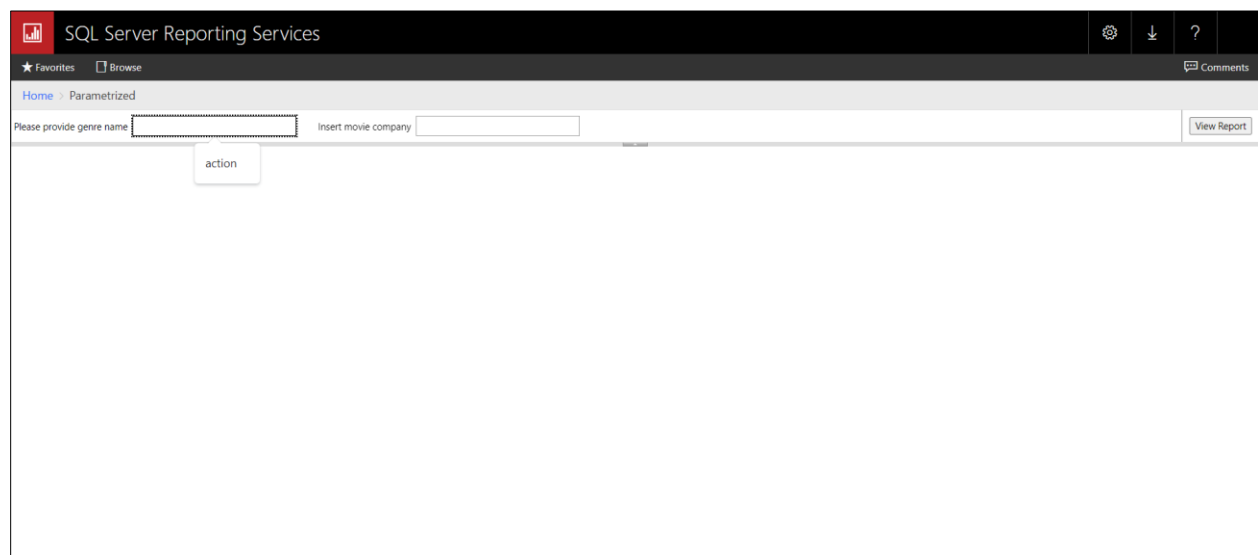
- **Create the Parameterized Report.**

At the point of selecting fields for Row groups and Column groups, drag and drop ‘Movie name’, ‘Ticket sold’, ‘ticket price’. In Choose the layout page, deselect all the option and click Next. Click Finish. Now, I should be able to see a table inserted in to the report body. I provide a suitable report title such ‘Genre and company wise movie data’ and design the look of the report accordingly.

I have added two parameters and List of values to parameters like this.



Then I save the report to report server. Then I can see the report can get the output like this.



After insert parameters to the report server. Then I can see output like this.

SQL Server Reporting Services

Home > Parametrized

Please provide genre name Insert movie company

Genre and company wise movie data

	name	tickets sold	ticket price
The Shining	The Shining	26	150000
The Blue Lagoon	The Blue Lagoon	42	80000
Star Wars: Episode V - The Empire Strikes Back	Star Wars: Episode V - The Empire Strikes Back	32	80000
Airplane!	Airplane!	12	100000
Caddyshack	Caddyshack	15	80000
Friday the 13th	Friday the 13th	7	150000
The Blues Brothers	The Blues Brothers	10	102000
Raging Bull	Raging Bull	5	150000
Superman II	Superman II	11	68182
The Long Riders	The Long Riders	4	150000

- **Create a Drill-Down Report.**

When I create this report, I used the dataset1 which I already build before.

Save as “Country wise movie details report”.

Then I go to insert tab, add new table and choose dataSet1 and select row Column as country,

Genre, Country and name. Choose

Column group as country and click next and click on finish button.


SQL Server Reporting Services

Home > Drill down report

Country wise movie details

country	Genre	Movie name
Argentina		
Aruba		
Australia		
Austria		
Belgium		
Brazil		
Canada		
Chile		
China		
Colombia		
Czech Republic		
Denmark		
Federal Republic of Yugoslavia		

when I click on expand particular country. I can see like this.


SQL Server Reporting Services

⚙️
⬇️
?
Sachintha Kumarasingh

★ Favorites
📄 Browse
💬 Comments

Home > Drill down report

⏪
<
1 of 2
>
⏩
↺
100%
📄
🖨️
Find | Next

Country wise movie details

country	Genre	Movie name
📁		
📁 Argentina		
	Drama	The Official Story
	Drama	Man Facing Southeast
	Crime	Nine Queens
	Comedy	La Ciénaga
	Adventure	The Motorcycle Diaries
	Drama	The Secret in Their Eyes
	Comedy	Wild Tales
	Drama	End of the Century
📁 Aruba		
📁 Australia		
📁 Austria		
📁 Belgium		
📁 Brazil		
📁 Canada		