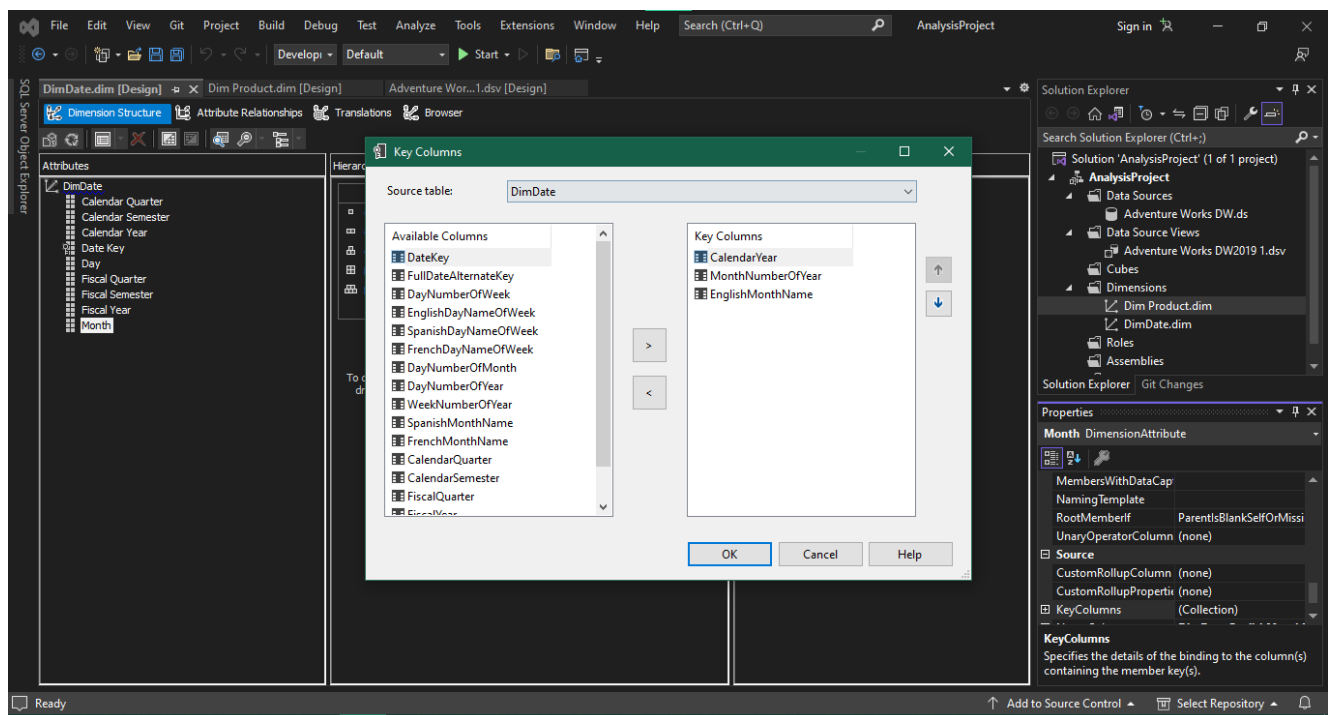# DWDM Lab by Usman Shehzaib
Lab Task Week # 5.
Creating a Date Dimension, Balanced Hierarchy

In this Week you will learn how we create different types of hierarchies. Remember to start SSMS and SQL Server 2019 before you proceed.

Following tasks will be performed on a DSV which you have already created.

1. Right click on Dimensions and choose New Dimension. Use an existing table. Use Dimdate attribute

2. In name column use fulldatealternate key.

3. Pick attributes date key, calendar quarter, calendar year, calendar semester, fiscal year, fiscal quarter, fiscal semester, English month name, English day name of week

4. Name the dimension as Dimdate and process it.

5. Go to browser check calendar quarter, calendar year and so on in hierarchy.

6. Rename English month name to month and Englishdaynameofweek to day

7. Go to month properties and change key column to month number of year.
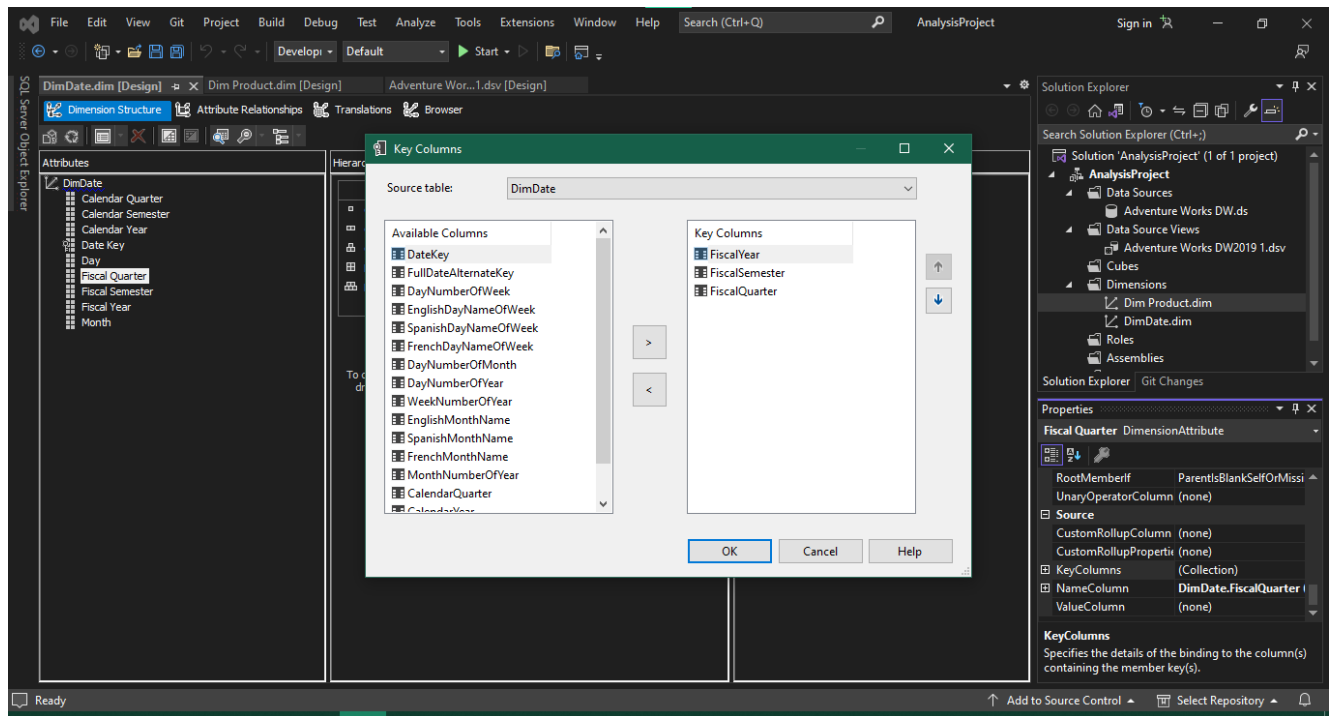
8. Promote month number of year to top

9. In name column change to English month name

10. open Day properties and change key column to Day number of week and promote it.

11. change name column to English day name of week

12. Process, reconnect and refresh.

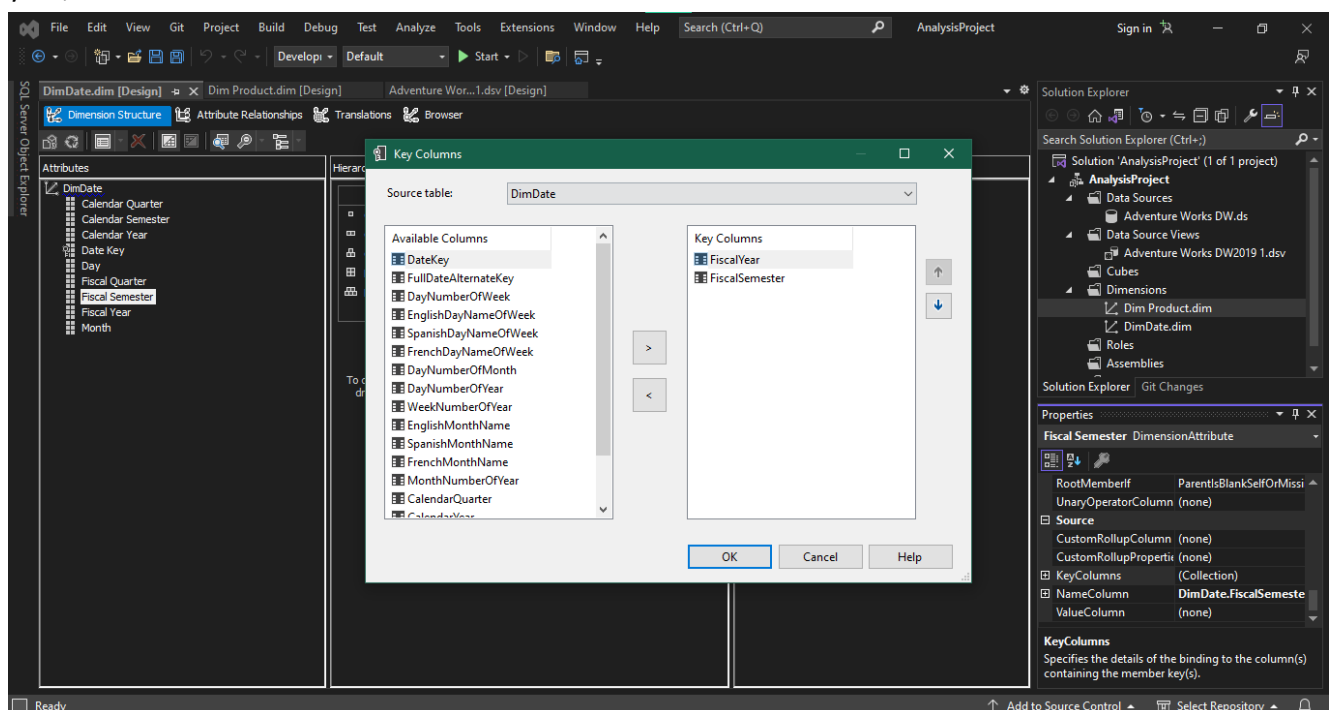13. Now check hierarchy in browser

14. Make two separate hierarchies for both calendar and fiscal year put in sequence Year, semester, quarter, month and date key

15. Rename the two hierarchies as Fiscal and Calendar.

16 a. Now open fiscal quarter properties and set key column and set hierarchy properly in sequence of year, semester, quarter.
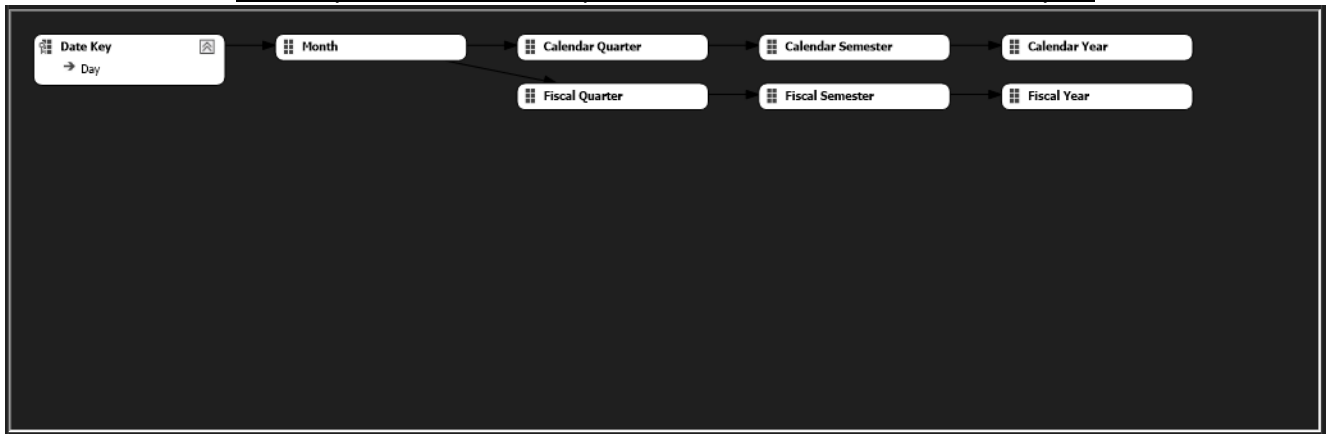

16 b. Now open fiscal semester properties and set key column and set hierarchy properly in sequence of year, semester.
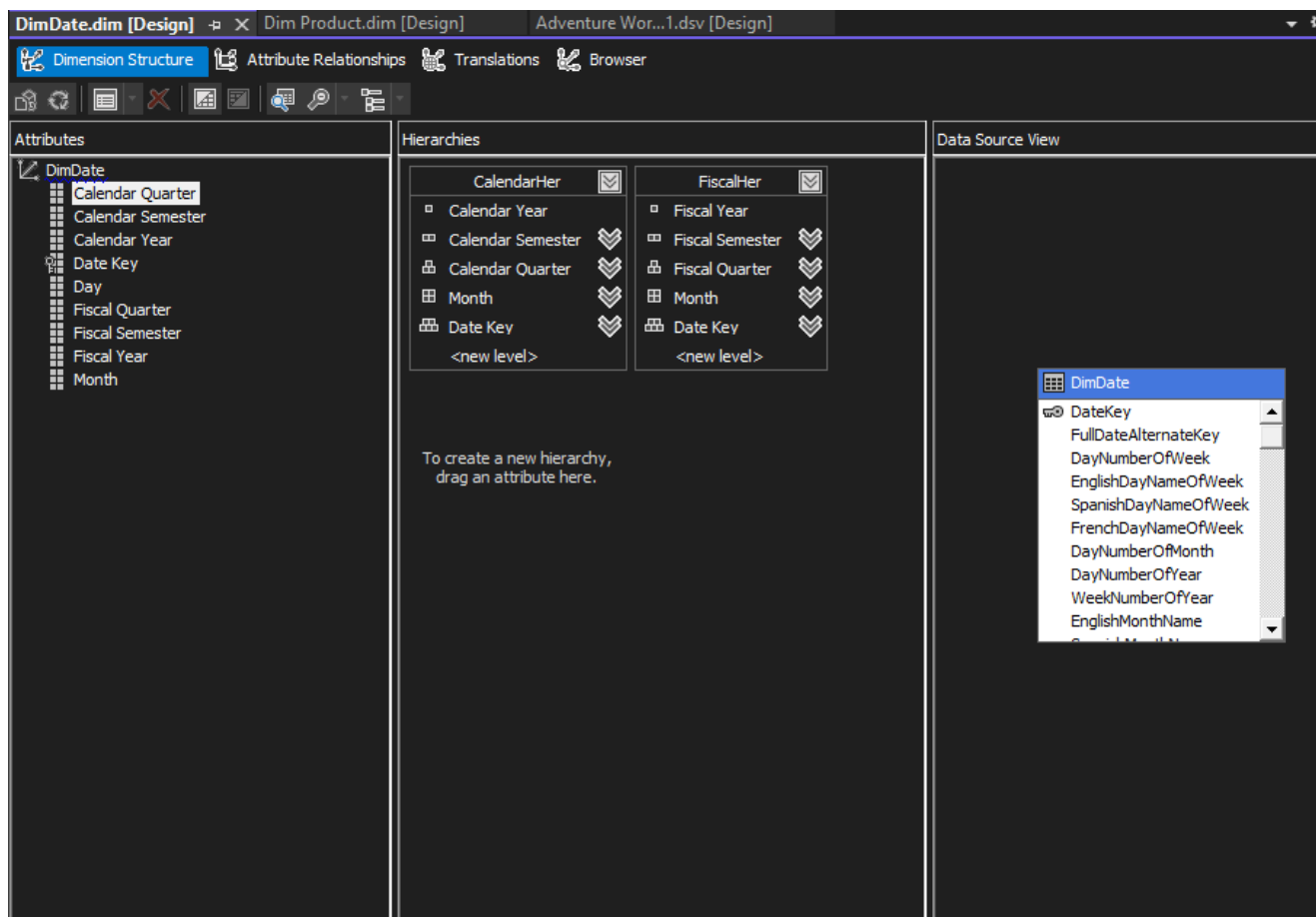
17. For Fiscal quarter set name column to relevant columns.

18. Repeat Step 16 for calendar Semester and calendar Quarter.

19. Go to attribute relationships and set two separate lines of relationships as follows.

Date key, month, fiscal quarter, fiscal semester , fiscal year
Date key, month, calendar quarter, calendar semester, calendar year

20. Make all relationship types to rigid

21. For all attributes make 'attribute hierarchies visible' to false except date

22. Go to month properties and make key columns as calendar year, month number of year and English month name

23. Process it, Go to browser

24. It's a balanced hierarchy as every child has same hierarchy

25. Its unnatural because same number appears in each case.