



# A Hands-on Guide

## Modeling Time Series Function in OBIEE

### Period Rolling Function

BISP is committed to provide BEST learning material to the beginners and advance learners. **In the same series, we have prepared a complete end-to-end Hands-on Guide for Modeling Time Series Function in OBIEE.** In the same series; we have prepared a complete “OBIEE11g How to Series” build on Sample OBIEE reports and Dashboard. Download our collection of “How to Series” for Oracle BI, Informatica, Data Stage product suite. There are 100s of case studies are available in our blog/site for free access for learners. Join our professional training program to learn from the experts.

#### History:

Version	Description Change	Author	Publish Date
0.1	Initial Draft	Kuldeep Mishra	1 <sup>st</sup> Jul 2012
0.1	1 <sup>st</sup> Review	Amit Sharma	5 <sup>th</sup> Jul 2012

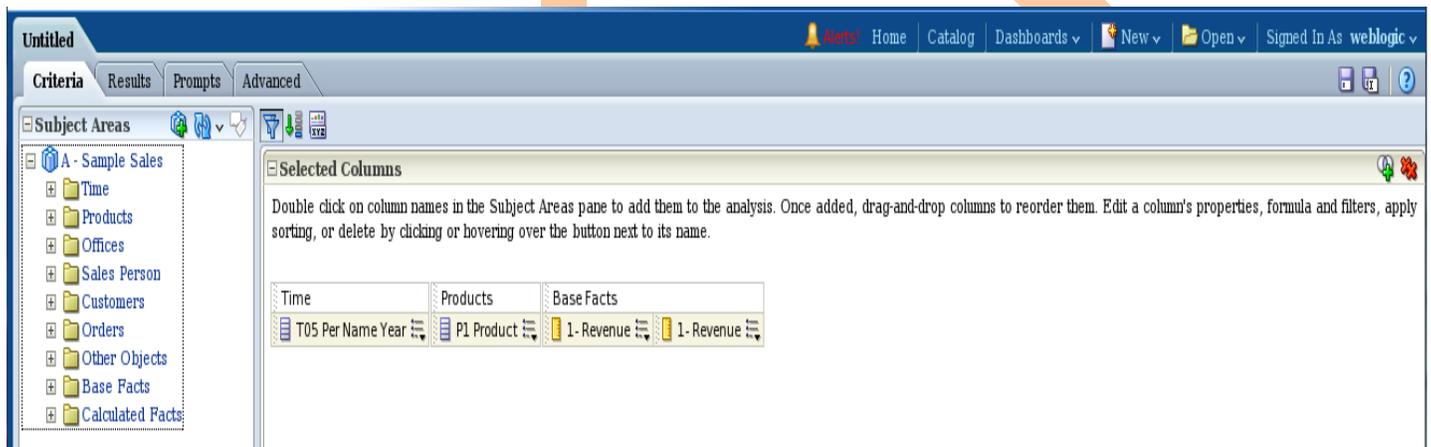
# Period Rolling Function

SQL does not provide a direct way to make time comparisons; you must model time series data in the Oracle BI repository. First, set up time dimensions based on the period table in your data warehouse. Then, you can define measures that take advantage of this time dimension to use the **AGO**, **TODATE**, and **PERIODROLLING** functions. At query time, the Oracle BI Server then generates highly optimized SQL that pushes the time offset processing down to the database whenever possible, resulting in the best performance and functionality.

The PERIODROLLING function lets you perform an aggregation across a specified set of query grain periods, rather than within a fixed time series grain. The most common use is to create rolling averages,

Step1 :- Click on New→Analysis then chose subject area from Select Subject Area.

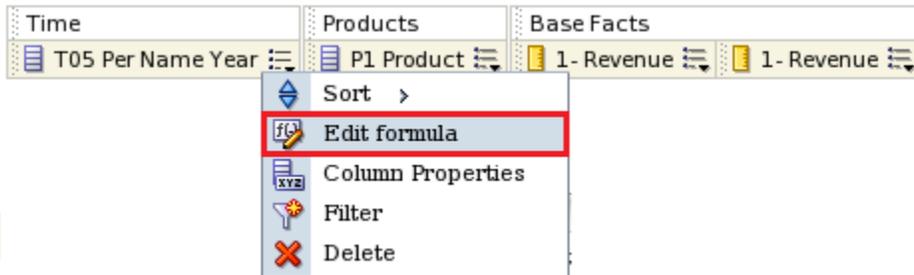
Below window will open ,Select tables column from left side Subject Area pane within Criteria. Here we can double click on tables column or drag and drop tables column from Subject Area pane to Selected Columns pane as below.



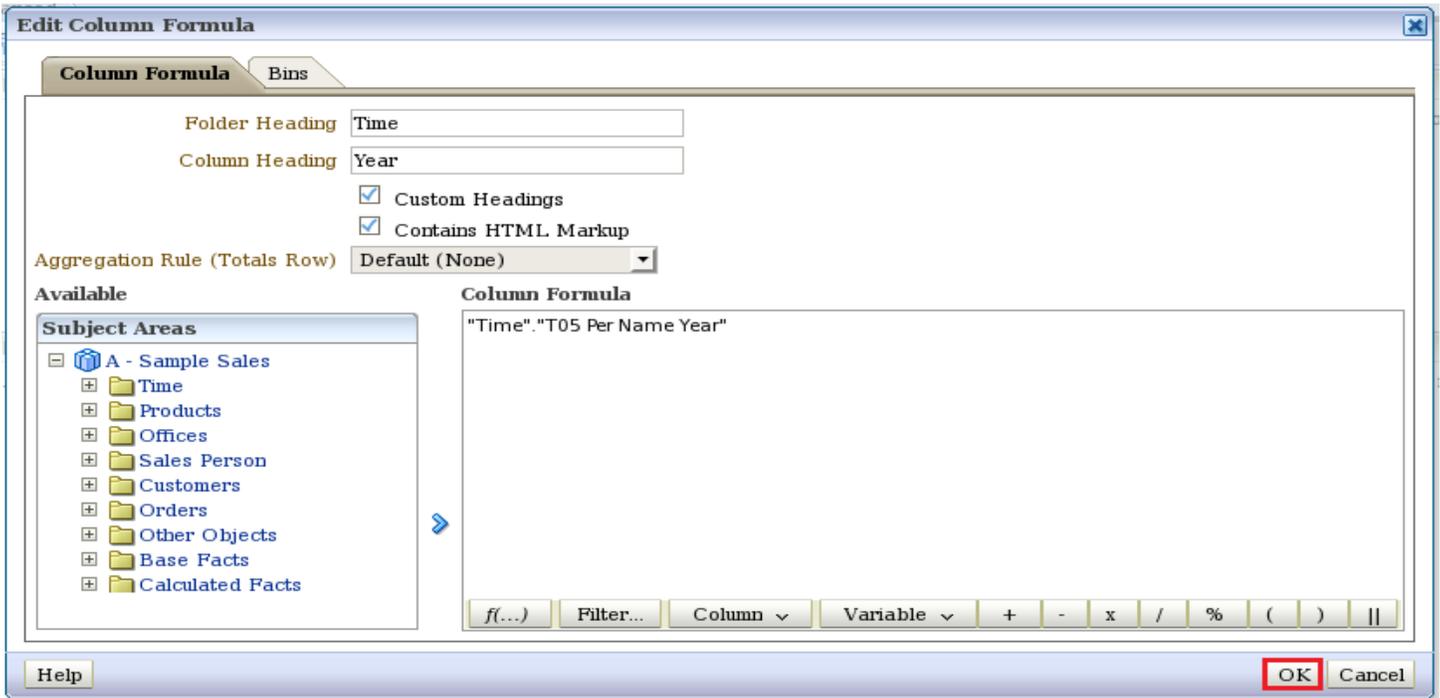
Click→Result.

Year	P1 Product	1- Revenue	1- Revenue
2008	7 Megapixel Digital Camer	1,333,824	1,333,824
	Bluetooth Adaptor	574,317	574,317
	CompCell RX3	654,557	654,557
	Game Station	900,273	900,273
	HomeCoach 2000	553,753	553,753
	Install	150,435	150,435
	KeyMax S-Phone	780,570	780,570
	LCD 36X Standard	1,355,263	1,355,263
	LCD HD Television	448,804	448,804
	MP3 Speakers System	321,835	321,835
	MPEG4 Camcorder	1,252,953	1,252,953
	Maintenance	148,012	148,012
	MaxiFun 2000	738,504	738,504
	MicroPod 60Gb	1,733,902	1,733,902
	Plasma HD Television	444,916	444,916
	PocketFun ES	943,881	943,881
	SoundX Nano 4Gb	827,197	827,197

Step2 :-In Time(T05 Per Name Year )→Edit Formula.

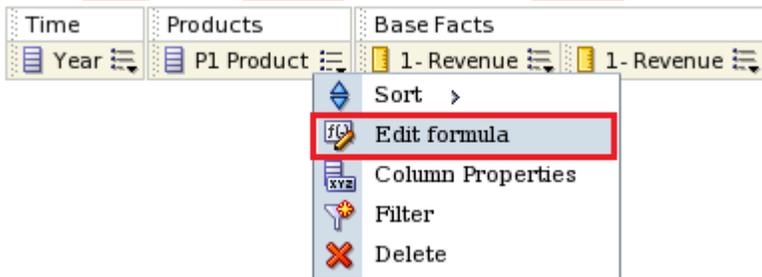


Edit Column Formula window will display. Here we Check→Custom Heading ,Check→Contain HTML Markup. Column Heading→Year.

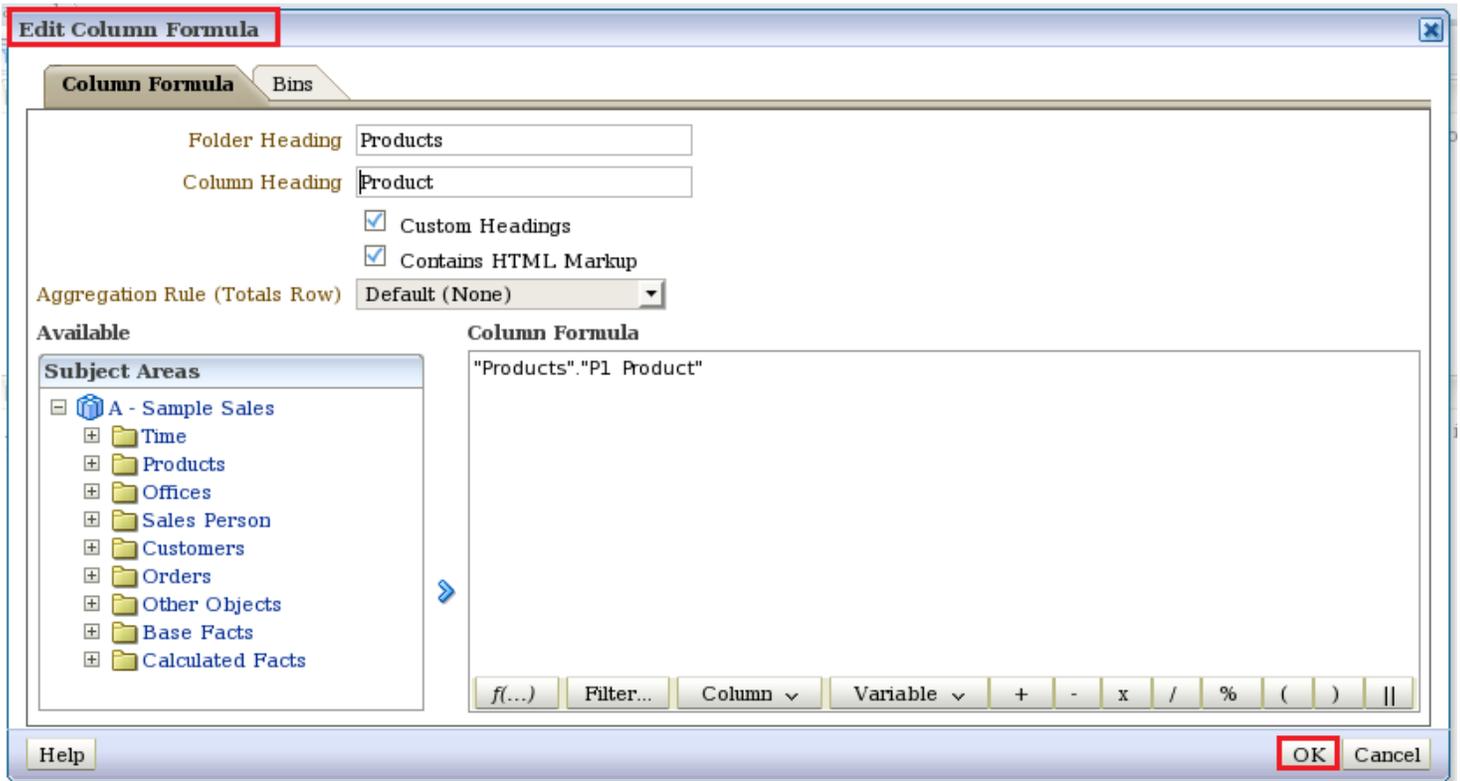


Click→Ok.

Step3:- In Products(P1 Product )→Edit Formula.

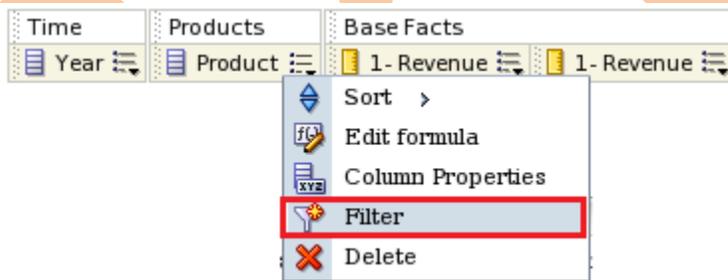


Edit Column Formula window will display. Here we Check→Custom Heading ,Check→Contain HTML Markup. Column Heading→Product.

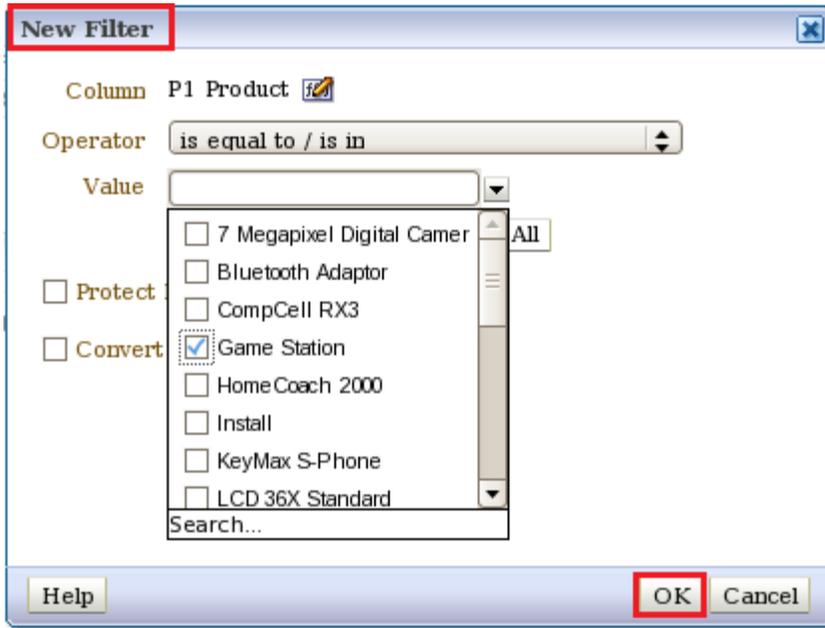


Click→Ok.

Step4:-In Products(P1 Product )→Filter.

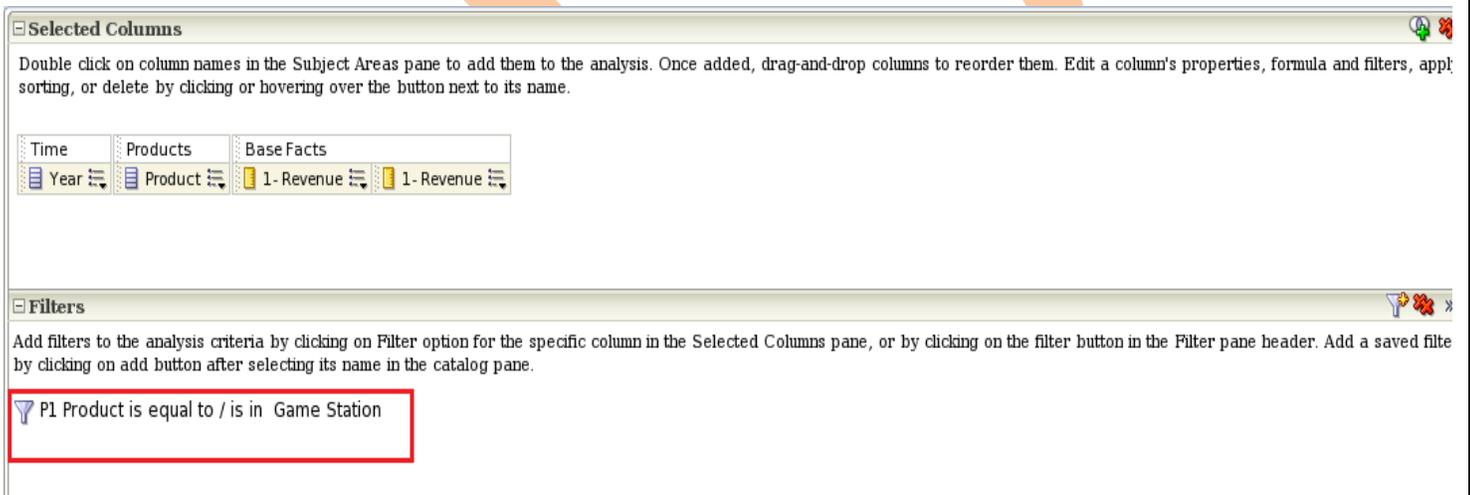


New Filter window will display. Here we select Operator→is equal to / is in , Value→Game Station.

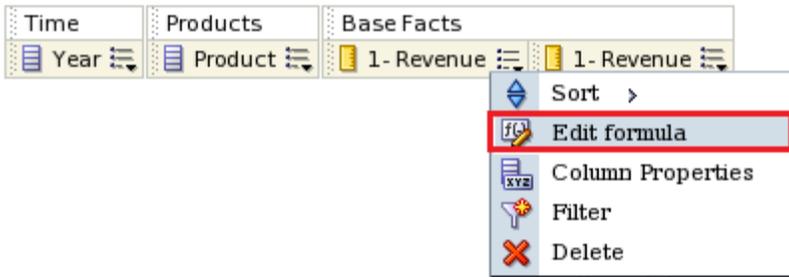


Click→Ok.

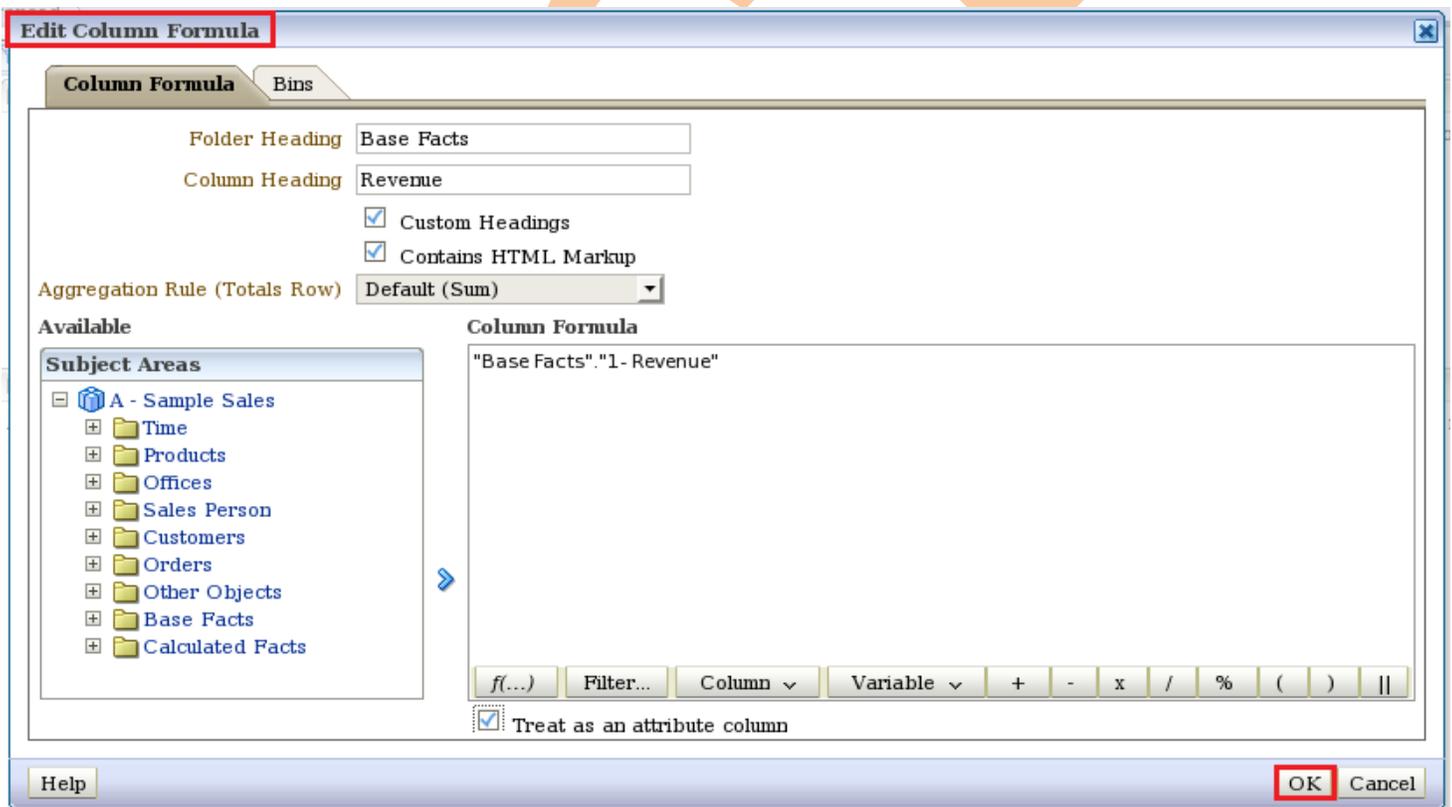
Here we see the applied filter



Step5:-In Base Facts(1- Revenue )→Edit Formula.

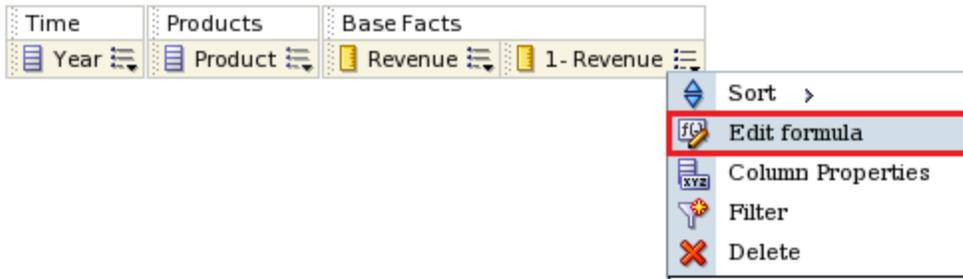


Edit Column Formula window will display. Here we Check → Custom Heading, Check → Contains HTML Markup. Column Heading → Revenue.



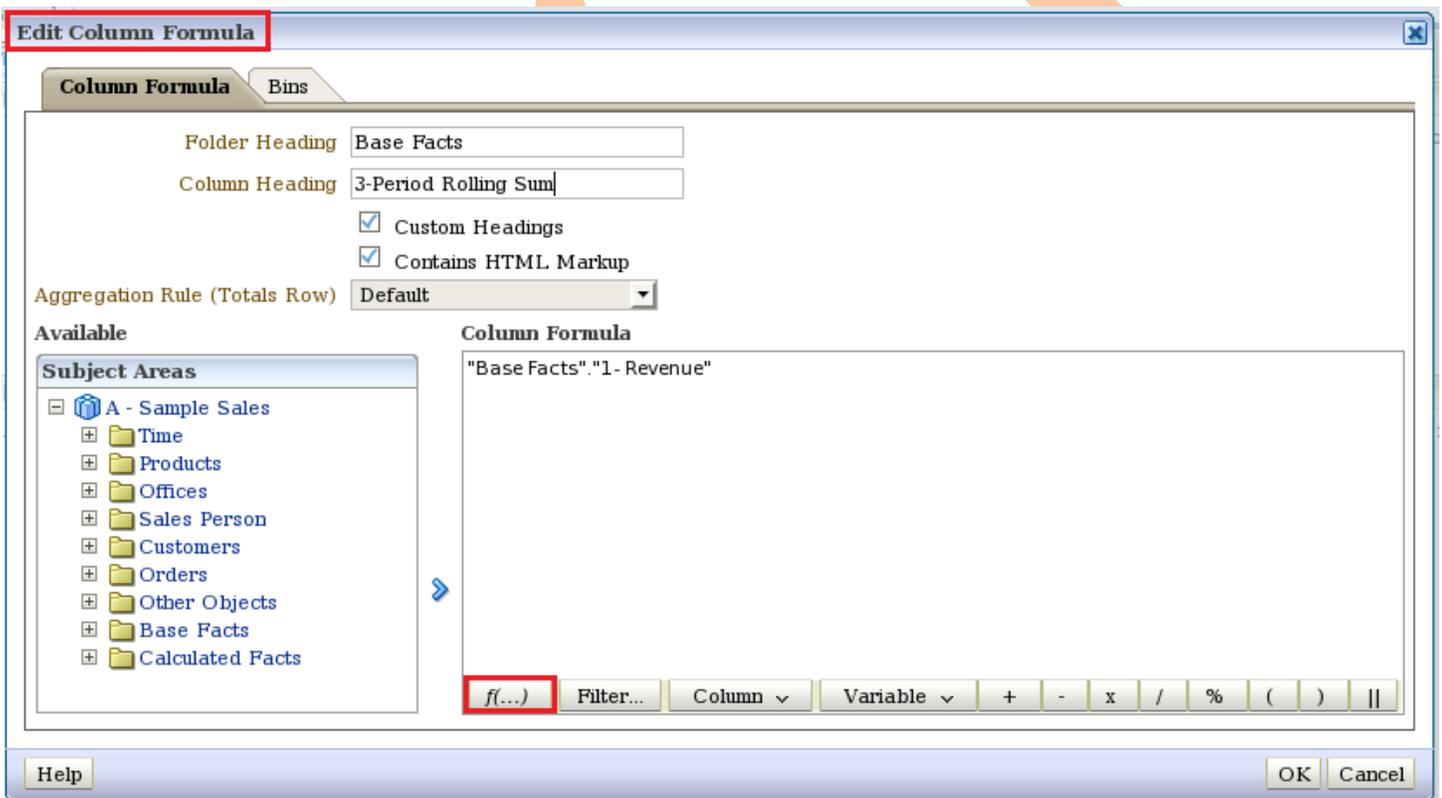
Click → Ok.

Step6:- In Base Facts(1- Revenue ) → Edit Formula.



Edit Column Formula window will display. Here we Check → Custom Heading, Check → Contains HTML Markup. Column Heading → 3-Period Rolling Sum.

Click → Function



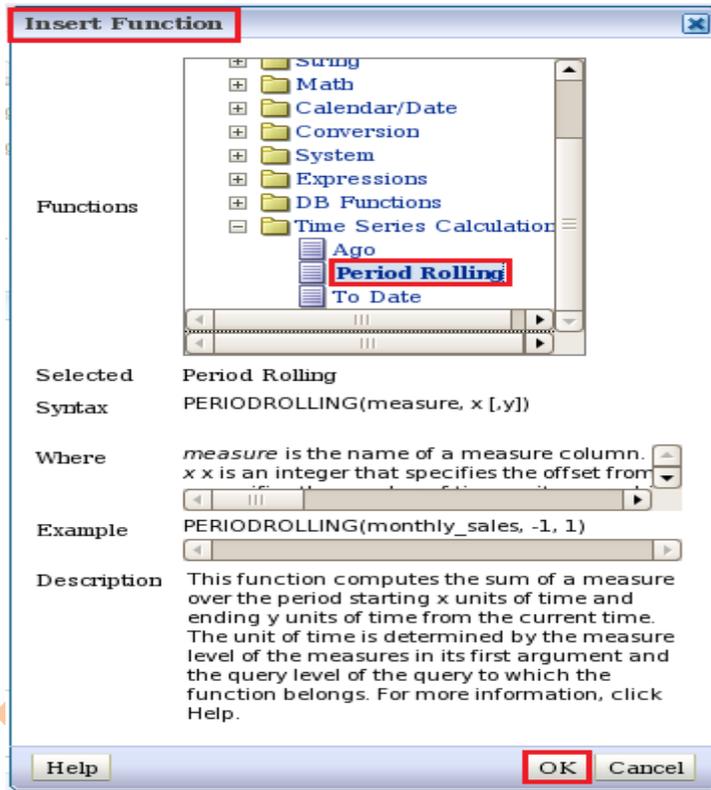
After Click → Function. insert Function window will display. here we select Function → Period Rolling.

Syntax → PERIODROLLING(measure, x [,y])

Where → *measure* is the name of a measure column. *x* is an integer that specifies the offset from the current time. *y* specifies the number of time units over which the function will compute. *hierarchy* is an optional argument that specifies the name of a hierarchy in a time dimension, such as *yr*, *mon*, *day*, that you want to use to compute the time window.

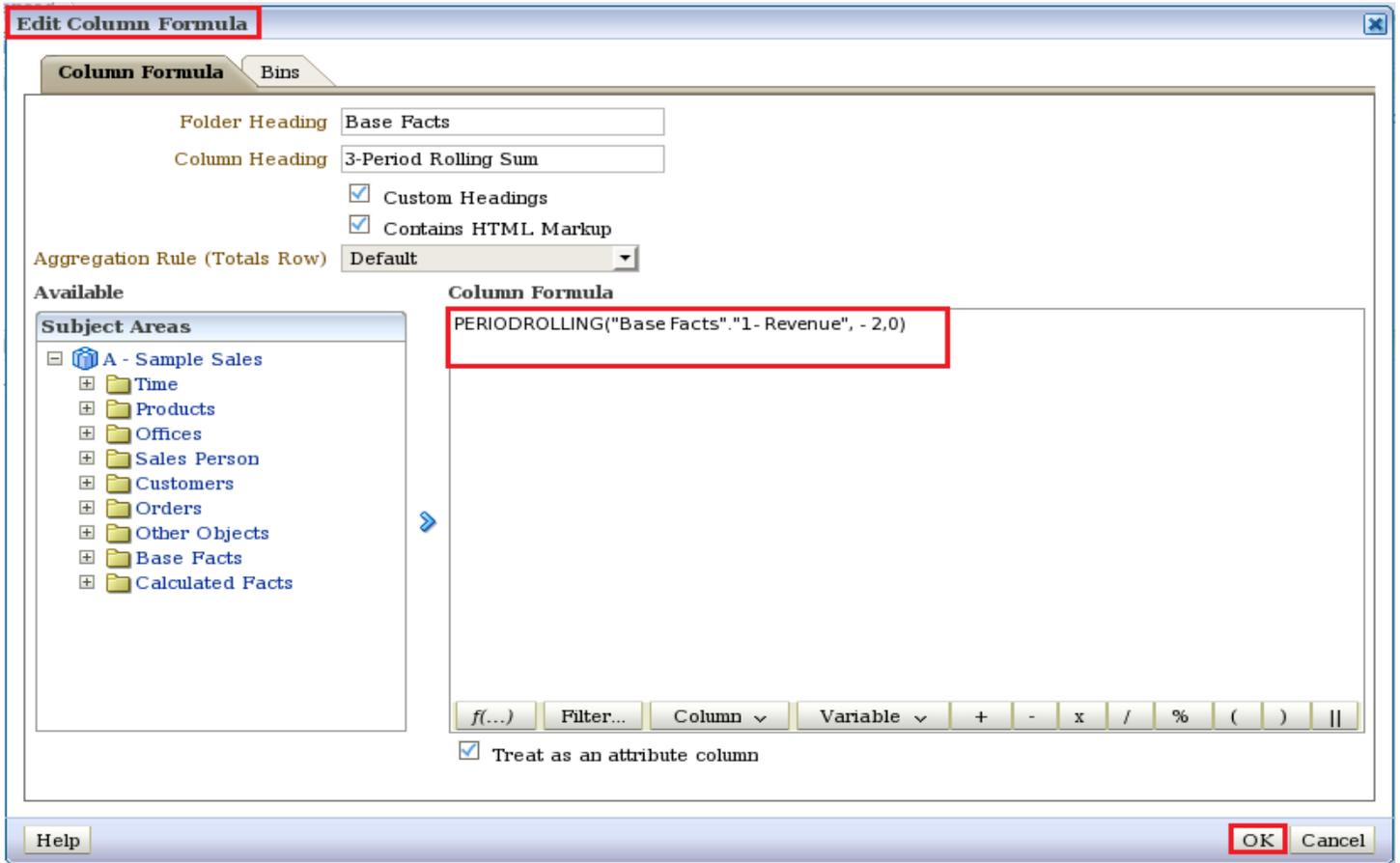
Example → `PERIODROLLING( monthly_sales, -1, 1)`

Description → This function computes the sum of a measure over the period starting *x* units of time and ending *y* units of time from the current time. The unit of time is determined by the measure level of the measures in its first argument and the query level of the query to which the function belongs. For more information, click Help.



Click → Ok.

Here we see Column Formula → PERIODROLLING("Base Facts"."1- Revenue", - 2,0)



Click → Ok.

After set all the property.

### Selected Columns

Double click on column names in the Subject Areas pane to add them to the analysis. Once added, drag-and-drop columns to reorder them. Edit a column's properties, formula and filters, apply sorting, or delete by clicking or hovering over the button next to its name.

Time	Products	Base Facts
Year	Product	Revenue 3-Period Rolling Sum

### Filters

Add filters to the analysis criteria by clicking on Filter option for the specific column in the Selected Columns pane, or by clicking on the filter button in the Filter pane header. Add a saved filter by clicking on add button after selecting its name in the catalog pane.

Product is equal to / is in Game Station

Step7:- Click→Result

Yearly Product Revenue Using Period Rolling Function			
Table			
Year	Product	Revenue	3-Period Rolling Sum
2008	Game Station	900,273	900,273
2009	Game Station	920,431	1,820,703
2010	Game Station	935,819	2,756,523
2011	Game Station		1,856,250