



# INSTITUTO TECNOLÓGICO DE CULIACÁN

## **Unidad 3:**

Minería de datos

## **MATERIA:**

Temas selectos de bases de datos

## **ACTIVIDAD:**

U3 T1 Expresiones RAESERVICIOS

## **CARRERA:**

Ingeniería en Sistemas Computacionales

## **MAESTRO:**

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Flores Mascareño America Citlaly

Culiacán, Sinaloa a 07 de mayo de 2023

## 1.-Monto de inversión durante los años por nombre de grupo y nombre de ventanilla.

### Impresión de consulta MDX

SELECT

```
[VW RAESERVICIOS].[AÑO].MEMBERS on columns,  
CROSSJOIN(  
{[VENTANILLAS].[NOMBRE].CHILDREN},  
{[VENTANILLAS].[NOMVEN].CHILDREN}) ON ROWS  
FROM FOLIOSSERVICIOS  
WHERE MEASURES.MONTOINVERSION
```

Messages		Results						
		All	2005	2006	2007	2008	2009	2010
FOSIN	COORDINACIÓN DE GESTIÓN EMPRESARIAL	(null)	(null)	(null)	(null)	(null)	(null)	(null)
FOSIN	FOSIN	80000	(null)	(null)	60000	20000	(null)	(null)
FOSIN	REFORMA REGULATORIA	(null)	(null)	(null)	(null)	(null)	(null)	(null)
URGE	URGE AHOME	32683723635.86	3109238325	5532724330.64	3752486015.76	5585718466.44	12426097668.42	2277458829.6
URGE	URGE ANGOSTURA	50490333.93	16229000	11776418.89	8922526.92	4215278	7713859.76	1633250.36
URGE	URGE BADIRAGUATO	14723077	6070000	870006	297500	715000	1881971	4888600
URGE	URGE CHOIX	547649557	10075800	2955900	955501	1620000	531947856	94500
URGE	URGE CONCORDIA	12311350	191700	9892500	847150	260000	110000	1010000
URGE	URGE COSALA	16696979.26	11111	478000	194170	8193613	2591436.72	5228648.54
URGE	URGE CULIACAN	19192665858.32	872551531.85	3773122576.93	6826246121.15	3751008518.82	2276548500.11	1693188609.46
URGE	URGE EL FUERTE	580210468	81340000	268210000	145531000	84191968	852500	85000
URGE	URGE ELOTA	133606108	29860000	70832500	10400699	12501362	9938604	72943
URGE	URGE ESCUINAPA	11516913899.35	235431557	248210159.75	350364931.34	348161329.74	10316908504	17837417.52
URGE	URGE GUASAVE	11114552621.23	299366968	1531363551.42	708385611.41	6861788187.58	1369993870.93	343654431.89
URGE	URGE MAZATLAN	46478241737.59	579602205	1180882556	6421038787.96	7417807303.44	4906970913	25971939972.19
URGE	URGE MOCORITO	161067323.42	8988595.96	73800449.15	72851025.81	5270052.5	157200	0
URGE	URGE NAVOLATO	1688006439.44	74148309.23	607529895.66	131866965.15	486638831.4	155071878	232750560
URGE	URGE ROSARIO	715854361.35	38290972	68479884	141844615	467141390.35	97500	0
URGE	URGE SALVADOR ALVARADO	801647086.45	8000000	102812053.08	160324668	177371119.61	276390905.36	76748340.4
URGE	URGE SAN IGNACIO	88652699	65923500	22238000	335010	70297.5	80567	5324.5
URGE	URGE SINALOA DE LEYVA	90185649	5273000	42528615	34320210	0	7828824	235000
URGE	URGE USE	6634045982.68	193996411.24	1749303256.27	3541257466.82	739344030.35	30473948	379670870
Unknown	Unknown	(null)	(null)	(null)	(null)	(null)	(null)	(null)

### Impresión de consulta SQL

```
SELECT G.NOMBRE, V.NOMVEN,  
'ALL' =SUM(R.MONTOINVERSION),  
'2005' = SUM(CASE WHEN YEAR(R.FECHA) = 2005 THEN R.MONTOINVERSION END),  
'2006' = SUM(CASE WHEN YEAR(R.FECHA) = 2006 THEN R.MONTOINVERSION END),  
'2007' = SUM(CASE WHEN YEAR(R.FECHA) = 2007 THEN R.MONTOINVERSION END),  
'2008' = SUM(CASE WHEN YEAR(R.FECHA) = 2008 THEN R.MONTOINVERSION END),  
'2009' = SUM(CASE WHEN YEAR(R.FECHA) = 2009 THEN R.MONTOINVERSION END),  
'2010' = SUM(CASE WHEN YEAR(R.FECHA) = 2010 THEN R.MONTOINVERSION END)  
FROM RAESERVICIOS R  
INNER JOIN VENTANILLAS V ON R.VENTANILLA = V.VENTANILLA  
INNER JOIN GRUPOS G ON V.GRUPO = G.GRUPO  
GROUP BY G.NOMBRE, V.NOMVEN
```

106 %

Results

Messages

	nombre	nomven	ALL	2005	2006	2007	2008	2009	2010	
1	FOSIN	FOSIN	80000.00	NULL	NULL	60000.00	20000.00	NULL	NULL	
2	URGE	URGE AHOME	32683723635.86	3109238325.00	5532724330.64	3752486015.76	5585718466.44	12426097668.42	2277458829.60	
3	URGE	URGE ANGOSTURA	50490333.93	16229000.00	11776418.89	8922526.92	4215278.00	7713859.76	1633250.36	
4	URGE	URGE BADIRAGUATO	14723077.00	6070000.00	870006.00	297500.00	715000.00	1881971.00	4888600.00	
5	URGE	URGE CHOIX	547649557.00	10075800.00	2955900.00	955501.00	1620000.00	531947856.00	94500.00	
6	URGE	URGE CONCORDIA	12311350.00	191700.00	9892500.00	847150.00	260000.00	110000.00	1010000.00	
7	URGE	URGE COSALA	16696979.26	11111.00	478000.00	194170.00	8193613.00	2591436.72	5228648.54	
8	URGE	URGE CULIACAN	19192665858.32	872551531.85	3773122576.93	6826246121.15	3751008518.82	2276548500.11	1693188609.46	
9	URGE	URGE EL FUERTE	580210468.00	81340000.00	268210000.00	145531000.00	84191968.00	852500.00	85000.00	
10	URGE	URGE ELOTA	133606108.00	29860000.00	70832500.00	10400699.00	12501362.00	9938604.00	72943.00	
11	URGE	URGE ESCUINAPA	11516913899.35	235431557.00	248210159.75	350364931.34	348161329.74	10316908504.00	17837417.52	
12	URGE	URGE GUASAVE	11114552621.23	299366968.00	1531363551.42	708385611.41	6861788187.58	1369993870.93	343654431.89	
13	URGE	URGE MAZATLAN	46478241737.59	579602205.00	1180882556.00	6421038787.96	7417807303.44	4906970913.00	25971939972.19	
14	URGE	URGE MOCORITO	161067323.42	8988595.96	73800449.15	72851025.81	5270052.50	157200.00	0.00	
15	URGE	URGE NAVOLATO	1688006439.44	74148309.23	607529895.66	131866965.15	486638831.40	155071878.00	232750560.00	
16	URGE	URGE ROSARIO	715854361.35	38290972.00	68479884.00	141844615.00	467141390.35	97500.00	0.00	
17	URGE	URGE SALVADOR ALVARADO	801647086.45	8000000.00	102812053.08	160324668.00	177371119.61	276390905.36	76748340.40	
18	URGE	URGE SAN IGNACIO	88652699.00	65923500.00	22238000.00	335010.00	70297.50	80567.00	5324.50	
19	URGE	URGE SINALOA DE LEYVA	90185649.00	5273000.00	42528615.00	34320210.00	0.00	7828824.00	235000.00	
20	URGE	URGE USE	6634045982.68	193996411.24	1749303256.27	3541257466.82	739344030.35	30473948.00	379670870.00	

## 2.-Monto de inversión por nombre de los grupos durante los años.

### Impresión de consulta MDX

```
SELECT  
[VENTANILLAS].[NOMBRE].CHILDREN ON COLUMNS,  
[VW RAESERVICIOS].[AÑO].MEMBERS ON ROWS  
FROM FOLIOSSERVICIOS  
WHERE MEASURES.MONTOINVERSION
```

	FOSIN	URGE	Unknown
All	80000	132521245166.88	(null)
2005	(null)	5634588986.28	(null)
2006	(null)	15298010652.79	(null)
2007	60000	22308469975.32	(null)
2008	20000	25952016748.73	(null)
2009	(null)	32321656506.3	(null)
2010	(null)	31006502297.46	(null)

### Impresión de consulta SQL

```
SELECT CONVERT(VARCHAR(4), YEAR(R.FECHA)) AS 'AÑO',  
SUM (CASE WHEN G.NOMBRE = 'FOSIN' THEN R.MONTOINVERSION END )AS 'FOSIN',  
SUM (CASE WHEN G.NOMBRE = 'URGE' THEN R.MONTOINVERSION END )AS 'URGE'  
FROM GRUPOS G  
INNER JOIN VENTANILLAS V ON V.GRUPO = G.GRUPO  
INNER JOIN RAESERVICIOS R ON R.VENTANILLA = V.VENTANILLA  
GROUP BY YEAR(R.FECHA), G.NOMBRE  
UNION  
SELECT  
'ALL',  
SUM (CASE WHEN G.NOMBRE = 'FOSIN' THEN R.MONTOINVERSION END )AS 'FOSIN',  
SUM (CASE WHEN G.NOMBRE = 'URGE' THEN R.MONTOINVERSION END )AS 'URGE'  
FROM GRUPOS G  
INNER JOIN VENTANILLAS V ON V.GRUPO = G.GRUPO  
INNER JOIN RAESERVICIOS R ON R.VENTANILLA = V.VENTANILLA
```

	AÑO	FOSIN	URGE
1	2005	NULL	5634588986.28
2	2006	NULL	15298010652.79
3	2007	NULL	22308469975.32
4	2007	60000.00	NULL
5	2008	NULL	25952016748.73
6	2008	20000.00	NULL
7	2009	NULL	32321656506.30
8	2010	NULL	31006502297.46
9	ALL	80000.00	132521245166.88

### 3.-Empleos a generar con el nombre de familias de servicios por mes

#### Impresión de consulta MDX

```
SELECT  
[SERVICIOS].[NOMBRE].CHILDREN ON COLUMNS,  
[VW RAESERVICIOS].[MES].CHILDREN ON ROWS  
FROM FOLIOSSERVICIOS  
WHERE MEASURES.EMPLEOSGENERAR
```

Messages Results		
	GESTIÓN EMPRESARIAL	Unknown
1	71440749	(null)
2	18801166	(null)
3	63937204	(null)
4	141521482	(null)
5	350981	(null)
6	552869	(null)
7	2131181	(null)
8	1721895	(null)
9	6696014	(null)
10	502144	(null)
11	4926381	(null)
12	37804	(null)

#### Impresión de consulta SQL

```
SELECT  
'GESTION EMPRESARIAL' = SUM (CASE WHEN SB.FAMILIA = 1 THEN  
EMPLEOSGENERAR END)  
FROM SERVICIOS S  
INNER JOIN SUBFAMILIAS SB ON SB.SUBFAMILIA = S.SUBFAMILIA  
INNER JOIN FAMILIAS F ON F.FAMILIA = SB.FAMILIA  
INNER JOIN RAESERVICIOS R ON R.SERVICIO = S.SERVICIO  
GROUP BY MONTH (R.Fecha)
```

Results Messages	
	GESTION EMPRESARIAL
1	71440749
2	18801166
3	63937204
4	141521482
5	350981
6	552869
7	2131181
8	1721895
9	6696014
10	502144
11	4926381
12	37804

## 4.-Empleos a generar con el nombre de familias de servicios por mes

### Impresión de consulta MDX

SELECT

[VW RAESERVICIOS].[AÑO].MEMBERS ON COLUMNS,

[USUARIOS].[NOMBRE].MEMBERS ON ROWS

FROM [FOLIOSSERVICIOS]

WHERE MEASURES.EMPLEOSGENERAR

	All	2005	2006	2007	2008	2009	2010
All	312619870	2015249	1042381	72993527	205428092	30584725	555896
ADMINISTRADOR DE SISTEMAS	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ADRIANA MORAN DIAZ	0	(null)	(null)	(null)	(null)	0	(null)
Agustín Báez Guillén	(null)	(null)	(null)	(null)	(null)	(null)	(null)
alejandro de la rocha treviño	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALEJANDRO GAYTAN MUÑOZ	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALFONSO GAMALIEL REYES ARELLANO	263	71	192	(null)	(null)	(null)	(null)
ALFONSO GERARDO ZEVADA ESCOBAR	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALICIA FABIOLA LOAIZA SALAZAR	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALICIA VERDUGO CAMPOS	623356	(null)	682	687	525512	96289	186
ALINA GUERRERO SIBRIAN	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALMA BEATRIZ SALAZAR PEREZ	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALMA YADIRA MORENO CASTILLO	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ALVARO NOEL OCHOA VEGA	(null)	(null)	(null)	(null)	(null)	(null)	(null)
AMPARO ALCARAZ .	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ANGEL DANIEL GUERRERO SALAZAR	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ANTONIO BARRAZA CARDENAS	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ANTONIO MANJARREZ CARDENAS	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ANTONIO MARTINEZ LOPEZ	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ARMANDO JAIR MORENO BERNAL	1535	1535	(null)	(null)	(null)	(null)	(null)
ARNOLDO VILLASENOR PACHECOS	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ARNOLDO VILLASENOR PACHECO	(null)	(null)	(null)	(null)	(null)	(null)	(null)
ARTURO SANTOS RAMÍREZ	(null)	(null)	(null)	(null)	(null)	(null)	(null)
AURELIO LUGO ESPINOZA	(null)	(null)	(null)	(null)	(null)	(null)	(null)

### Impresión de consulta SQL

SELECT ' ALL' AS [NOMBRE DE USUARIO],

'ALL'= SUM (R.EMPLEOSGENERAR),

'2005'= SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSGENERAR END ),

'2006'= SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSGENERAR END ),

'2007'= SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSGENERAR END ),

'2008'= SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSGENERAR END ),

'2009'= SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSGENERAR END ),

'2010'= SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSGENERAR END )

FROM RAESERVICIOS R

INNER JOIN USUARIOS U ON U.USUARIO = R.USUARIO

UNION

SELECT U.NOMBRE,

'ALL'= SUM (R.EMPLEOSGENERAR),

'2005'= SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSGENERAR END ),

'2006'= SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSGENERAR END ),

'2007'= SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSGENERAR END ),

'2008'= SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSGENERAR END ),

'2009'= SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSGENERAR END ),

'2010'= SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSGENERAR END )

FROM RAESERVICIOS R

INNER JOIN USUARIOS U ON U.USUARIO = R.USUARIO

GROUP BY U.NOMBRE

ORDER BY 1 ASC





## Impresión de consulta SQL

```

SELECT
V.NOMVEN,
SUM(RS.EMPLEOSGENERAR) AS 'ALL',
SUM(CASE WHEN MONTH(RS.FECHA) = 1 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '1',
SUM(CASE WHEN MONTH(RS.FECHA) = 2 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '2',
SUM(CASE WHEN MONTH(RS.FECHA) = 3 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '3',
SUM(CASE WHEN MONTH(RS.FECHA) = 4 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '4',
SUM(CASE WHEN MONTH(RS.FECHA) = 5 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '5',
SUM(CASE WHEN MONTH(RS.FECHA) = 6 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '6',
SUM(CASE WHEN MONTH(RS.FECHA) = 7 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '7',
SUM(CASE WHEN MONTH(RS.FECHA) = 8 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '8',
SUM(CASE WHEN MONTH(RS.FECHA) = 9 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '9',
SUM(CASE WHEN MONTH(RS.FECHA) = 10 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '10',
SUM(CASE WHEN MONTH(RS.FECHA) = 11 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '11',
SUM(CASE WHEN MONTH(RS.FECHA) = 12 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '12'
FROM RAESERVICIOS RS
RIGHT JOIN VENTANILLAS V ON V.VENTANILLA = RS.VENTANILLA
GROUP BY V.NOMVEN
UNION
SELECT
'ALL',
SUM(RS.EMPLEOSGENERAR) AS 'ALL',
SUM(CASE WHEN MONTH(RS.FECHA) = 1 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '1',
SUM(CASE WHEN MONTH(RS.FECHA) = 2 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '2',
SUM(CASE WHEN MONTH(RS.FECHA) = 3 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '3',
SUM(CASE WHEN MONTH(RS.FECHA) = 4 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '4',
SUM(CASE WHEN MONTH(RS.FECHA) = 5 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '5',
SUM(CASE WHEN MONTH(RS.FECHA) = 6 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '6',
SUM(CASE WHEN MONTH(RS.FECHA) = 7 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '7',
SUM(CASE WHEN MONTH(RS.FECHA) = 8 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '8',
SUM(CASE WHEN MONTH(RS.FECHA) = 9 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '9',
SUM(CASE WHEN MONTH(RS.FECHA) = 10 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '10',
SUM(CASE WHEN MONTH(RS.FECHA) = 11 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '11',
SUM(CASE WHEN MONTH(RS.FECHA) = 12 THEN RS.EMPLEOSGENERAR ELSE NULL END) AS '12'
FROM RAESERVICIOS RS

```

	NOMVEN	ALL	1	2	3	4	5	6	7	8	9	10	11	12
1	ALL	312619870	71440749	18801166	63937204	141521482	350981	552869	2131181	1721895	6696014	502144	4926381	37804
2	COORDINACIÓN DE GESTIÓN EMPRESARIAL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
3	FOSIN	6	NULL	NULL	NULL	1	0	5	NULL	NULL	NULL	0	NULL	NULL
4	REFORMA REGULATORIA	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
5	URGE AHOME	1141560	4340	801908	1902	3639	2237	4561	2990	301255	1995	12564	3170	999
6	URGE ANGOSTURA	122031	15057	68	85	48	65057	40068	101	1169	191	90	43	54
7	URGE BADIRAGUATO	127	0	3	3	4	17	1	34	26	22	11	6	0
8	URGE CHOIX	3321	5	12	3007	6	18	26	23	45	66	28	66	19
9	URGE CONCORDIA	147	7	0	7	14	14	9	6	10	5	37	32	6
10	URGE COSALA	292	15	73	9	18	11	76	22	29	9	2	25	3
11	URGE CULIACAN	9560954	216617	4912745	12443	3499784	44589	501894	21644	256401	2965	89694	1423	755
12	URGE EL FUERTE	1637	0	3	341	60	48	247	497	280	67	5	89	0
13	URGE ELOTA	872	7	55	46	205	177	19	31	136	44	38	90	24
14	URGE ESCUINAPA	9968	410	602	3030	157	677	1505	177	523	286	645	1188	768
15	URGE GUASAVE	29818521	14158961	12001136	21130	3001256	1614	1271	1061	554673	2230	73462	1193	534
16	URGE MAZATLAN	267484831	57019164	2596	63752342	135005172	2033	2035	2496	4277	6605223	182307	4907013	173
17	URGE MOCORITO	321467	25063	106	60389	125	55150	21	6	77	21	140362	10147	30000
18	URGE NAVOLATO	6126	201	410	492	169	238	228	247	891	2178	753	141	178
19	URGE ROSARIO	611746	15	304	67	10225	159	124	123	600079	96	87	456	11
20	URGE SALVADOR ALVARADO	2280	403	131	353	173	107	137	112	98	241	349	158	18
21	URGE SAN IGNACIO	400384	4	80007	80003	26	80018	55	80028	163	80007	32	20	21
22	URGE SINALOA DE LEYVA	2453	86	124	146	125	64	108	798	152	141	233	470	6
23	URGE USE	3131147	394	1000883	1409	275	98753	479	2020785	1611	227	1445	651	4235

## 6.-Empleos a generar por meses durante los años

### Impresión de consulta MDX

```
SELECT [VW RAESERVICIOS].[AÑO].MEMBERS ON COLUMNS,
[VW RAESERVICIOS].[MES].MEMBERS ON ROWS
FROM [FOLIOSSERVICIOS]
WHERE [MEASURES].[EMPLEOSGENERAR]
```

Messages		Results					
	All	2005	2006	2007	2008	2009	2010
All	312619870	2015249	1042381	72993527	205428092	30584725	555896
1	71440749	209	5553	27140373	30174175	14092944	27495
2	18801166	160	1001163	12082084	843214	4873202	1343
3	63937204	314	734	30102431	33751040	15209	67476
4	141521482	677	581	3003846	135043011	3471434	1933
5	350981	2401	787	137625	24148	134180	51840
6	552869	2022	1602	2485	23527	521859	1374
7	2131181	2001157	1269	106322	1691	19820	922
8	1721895	3170	1633	307249	257058	750896	401889
9	6696014	1009	944	83368	6768	6603055	870
10	502144	866	3313	1810	395030	100371	754
11	4926381	2469	2565	12465	4907564	1318	(null)
12	37804	795	22237	13469	866	437	(null)

### Impresión de consulta SQL

```
SELECT 'ALL' AS [MES],
'ALL' = SUM (R.EMPLEOSGENERAR),
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSGENERAR END ),
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSGENERAR END ),
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSGENERAR END ),
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSGENERAR END ),
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSGENERAR END ),
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSGENERAR END )
FROM RAESERVICIOS R
UNION
SELECT CAST(MONTH(R.FECHA) AS VARCHAR),
'ALL' = SUM (R.EMPLEOSGENERAR),
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSGENERAR END ),
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSGENERAR END ),
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSGENERAR END ),
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSGENERAR END ),
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSGENERAR END ),
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSGENERAR END )
FROM RAESERVICIOS R
GROUP BY MONTH(R.FECHA)
ORDER BY 1 ASC
```



	Mes	ALL	2005	2006	2007	2008	2009	2010
1	1	71440749	209	5553	27140373	30174175	14092944	27495
2	10	502144	866	3313	1810	395030	100371	754
3	11	4926381	2469	2565	12465	4907564	1318	NULL
4	12	37804	795	22237	13469	866	437	NULL
5	2	18801166	160	1001163	12082084	843214	4873202	1343
6	3	63937204	314	734	30102431	33751040	15209	67476
7	4	141521482	677	581	3003846	135043011	3471434	1933
8	5	350981	2401	787	137625	24148	134180	51840
9	6	552869	2022	1602	2485	23527	521859	1374
10	7	2131181	2001157	1269	106322	1691	19820	922
11	8	1721895	3170	1633	307249	257058	750896	401889
12	9	6696014	1009	944	83368	6768	6603055	870
13	ALL	312619870	2015249	1042381	72993527	205428092	30584725	555896

## 7.-Todas las medidas por nombre de grupo

### Impresión de consulta MDX

```
SELECT [MEASURES].MEMBERS ON COLUMNS,
[VENTANILLAS].[NOMBRE].CHILDREN ON ROWS
FROM [FOLIOSERVICIOS]
```

	MONTOINVERSION	EMPLEOSGENERAR	EMPLEOSTEMP	MONTOFINAL
FOSIN	80000	6	3	0
URGE	132521245166.88	312619864	327682	14915175
Unknown	(null)	(null)	(null)	(null)

### Impresión de consulta SQL

```
SELECT G.NOMBRE as [NOMBRE DE GRUPO] ,
'MONTO DE INVERSION' = SUM(CASE MONTOINVERSION WHEN MONTOINVERSION THEN
MONTOINVERSION ELSE 0 END) ,
'EMPLEOS A GENERAR' = SUM(CASE EMPLEOSGENERAR WHEN EMPLEOSGENERAR THEN
EMPLEOSGENERAR ELSE 0 END),
'EMPLEOS TEMPORALES' = SUM(CASE EMPLEOSTEMP WHEN EMPLEOSTEMP THEN EMPLEOSTEMP ELSE 0
END),
'MONTO FINAL' = SUM(CASE MONTOFINAL WHEN MONTOFINAL THEN MONTOFINAL ELSE 0 END)
FROM RAESERVICIOS R
INNER JOIN VENTANILLAS V ON V.VENTANILLA = R.VENTANILLA
INNER JOIN GRUPOS G ON G.GRUPO = V.GRUPO
GROUP BY G.NOMBRE
ORDER BY 1 ASC
```

	NOMBRE DE GRUPO	MONTO DE INVERSION	EMPLEOS A GENERAR	EMPLEOS TEMPORALES	MONTO FINAL
1	FOSIN	80000.00	6	3	0.00
2	URGE	132521245166.88	312619864	327682	14915175.00

## 8.-Todas las medidas por año y empleos a generar

### Impresión de consulta MDX

```
SELECT [VW RAESERVICIOS].[AÑO].MEMBERS ON COLUMNS,  
[MEASURES].MEMBERS ON ROWS  
FROM [FOLIOSSERVICIOS]
```

	All	2005	2006	2007	2008	2009	2010
MONTOINVERSION	132521325166.88	5634588986.28	15298010652.79	22308529975.32	25952036748.73	32321656506.3	31006502297.46
EMPLEOSGENERAR	312619870	2015249	1042381	72993527	205428092	30584725	555896
EMPLEOSTEMP	327685	75733	60248	49329	50392	28542	63441
MONTOFINAL	14915175	227000	9520918	1864757	3302500	0	0

### Impresión de consulta SQL

```
SELECT 'MONTOINVERSION',  
' ALL' = SUM (R.MONTOINVERSION),  
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.MONTOINVERSION END ),  
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.MONTOINVERSION END ),  
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.MONTOINVERSION END ),  
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.MONTOINVERSION END ),  
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.MONTOINVERSION END ),  
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.MONTOINVERSION END )  
FROM RAESERVICIOS R  
UNION  
SELECT 'EMPLEOSGENERAR',  
' ALL' = SUM (R.EMPLEOSGENERAR),  
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSGENERAR END ),  
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSGENERAR END ),  
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSGENERAR END ),  
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSGENERAR END ),  
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSGENERAR END ),  
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSGENERAR END )  
FROM RAESERVICIOS R  
UNION  
SELECT 'EMPLEOSTEMP',  
' ALL' = SUM (R.EMPLEOSTEMP),  
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.EMPLEOSTEMP END ),  
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.EMPLEOSTEMP END ),  
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.EMPLEOSTEMP END ),  
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.EMPLEOSTEMP END ),  
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.EMPLEOSTEMP END ),  
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.EMPLEOSTEMP END )  
FROM RAESERVICIOS R  
UNION  
SELECT 'MONTOFINAL',  
' ALL' = SUM(R.MONTOFINAL),  
'2005' = SUM(CASE WHEN YEAR(R.FECHA) =2005 THEN R.MONTOFINAL END ),  
'2006' = SUM(CASE WHEN YEAR(R.FECHA) =2006 THEN R.MONTOFINAL END ),  
'2007' = SUM(CASE WHEN YEAR(R.FECHA) =2007 THEN R.MONTOFINAL END ),  
'2008' = SUM(CASE WHEN YEAR(R.FECHA) =2008 THEN R.MONTOFINAL END ),  
'2009' = SUM(CASE WHEN YEAR(R.FECHA) =2009 THEN R.MONTOFINAL END ),  
'2010' = SUM(CASE WHEN YEAR(R.FECHA) =2010 THEN R.MONTOFINAL END )  
FROM RAESERVICIOS R
```

	(No column name)	All	2005	2006	2007	2008	2009	2010
1	Montoinversion	132521325166.88	5634588986.28	15298010652.79	22308529975.32	25952036748.73	32321656506.30	31006502297.46
2	EmpleosGenerar	312619870.00	2015249.00	1042381.00	72993527.00	205428092.00	30584725.00	555896.00
3	EmpleosTemp	327685.00	75733.00	60248.00	49329.00	50392.00	28542.00	63441.00
4	MontoFinal	14915175.00	227000.00	9520918.00	1864757.00	3302500.00	0.00	0.00

## 9.-Todas las medidas por nombres de familias

### Impresión de consulta MDX

```
SELECT [MEASURES].MEMBERS ON COLUMNS,
[SERVICIOS].[NOMBRE].MEMBERS ON ROWS
FROM [FOLIOSERVICIOS]
```

	MONTOINVERSION	EMPLEOSGENERAR	EMPLEOSTEMP	MONTOFINAL
All	132521325166.88	312619870	327685	14915175
GESTIÓN EMPRESARIAL	132521325166.88	312619870	327685	14915175
Unknown	(null)	(null)	(null)	(null)

### Impresión de consulta SQL

```
SELECT 'ALL',
'MONTOINVERSION' = SUM(CASE MONTOINVERSION WHEN MONTOINVERSION THEN MONTOINVERSION
ELSE 0 END),
'EMPLEOSGENERAR' = SUM(CASE EMPLEOSGENERAR WHEN EMPLEOSGENERAR THEN EMPLEOSGENERAR
ELSE 0 END),
'EMPLEOSTEMP' = SUM(CASE EMPLEOSTEMP WHEN EMPLEOSTEMP THEN EMPLEOSTEMP ELSE 0 END),
'MONTOFINAL' = SUM(CASE MONTOFINAL WHEN MONTOFINAL THEN MONTOFINAL ELSE 0 END)
FROM RAESERVICIOS R
INNER JOIN SERVICIOS SE ON SE.SERVICIO = R.SERVICIO
INNER JOIN SUBFAMILIAS S ON S.SUBFAMILIA = SE.SUBFAMILIA
INNER JOIN FAMILIAS F ON F.FAMILIA = S.FAMILIA
UNION
SELECT F.NOMBRE,
'MONTOINVERSION' = SUM(CASE MONTOINVERSION WHEN MONTOINVERSION THEN MONTOINVERSION
ELSE 0 END),
'EMPLEOSGENERAR' = SUM(CASE EMPLEOSGENERAR WHEN EMPLEOSGENERAR THEN EMPLEOSGENERAR
ELSE 0 END),
'EMPLEOSTEMP' = SUM(CASE EMPLEOSTEMP WHEN EMPLEOSTEMP THEN EMPLEOSTEMP ELSE 0 END),
'MONTOFINAL' = SUM(CASE MONTOFINAL WHEN MONTOFINAL THEN MONTOFINAL ELSE 0 END)
FROM RAESERVICIOS R
INNER JOIN SERVICIOS SE ON SE.SERVICIO = R.SERVICIO
INNER JOIN SUBFAMILIAS S ON S.SUBFAMILIA = SE.SUBFAMILIA
INNER JOIN FAMILIAS F ON F.FAMILIA = S.FAMILIA
GROUP BY F.NOMBRE
ORDER BY 1 ASC
```

	(No column name)	MONTOINVERSION	EMPLEOSGENERAR	EMPLEOSTEMP	MONTOFINAL
1	ALL	132521325166.88	312619870	327685	14915175.00
2	GESTIÓN EMPRESARIAL	132521325166.88	312619870	327685	14915175.00

## 10.-Todas las medidas por nombres de familias

### Impresión de consulta MDX

```
SELECT {[VW RAESERVICIOS].[MES].[1]:[VW RAESERVICIOS].[MES].[3]} ON COLUMNS,  
[VW RAESERVICIOS].[AÑO].CHILDREN ON ROWS  
FROM [foliosservicios] WHERE [Measures].[EMPLEOSGENERAR]
```

	1	2	3
2005	209	160	314
2006	5553	1001163	734
2007	27140373	12082084	30102431
2008	30174175	843214	33751040
2009	14092944	4873202	15209
2010	27495	1343	67476

### Impresión de consulta SQL

```
SELECT  
CONVERT(NVARCHAR(4),YEAR(R.FECHA)) AS 'AÑO',  
SUM(CASE WHEN MONTH(R.FECHA) = 1 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '1',  
SUM(CASE WHEN MONTH(R.FECHA) = 2 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '2',  
SUM(CASE WHEN MONTH(R.FECHA) = 3 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '3'  
FROM RAESERVICIOS R  
GROUP BY YEAR(R.FECHA)  
UNION  
SELECT  
'ALL',  
SUM(CASE WHEN MONTH(R.FECHA) = 1 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '1',  
SUM(CASE WHEN MONTH(R.FECHA) = 2 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '2',  
SUM(CASE WHEN MONTH(R.FECHA) = 3 THEN R.EMPLEOSGENERAR ELSE NULL END) AS '3'  
FROM RAESERVICIOS R
```

	AÑO	1	2	3
1	2005	209	160	314
2	2006	5553	1001163	734
3	2007	27140373	12082084	30102431
4	2008	30174175	843214	33751040
5	2009	14092944	4873202	15209
6	2010	27495	1343	67476
7	ALL	71440749	18801166	63937204