

## Practica de particiones

- Creamos la base de datos

```
CREATE DATABASE Kardex
```

```
use Kardex
```

- Creamos las particiones en las tablas

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_A]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_B]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_C]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_D]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_E]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_F]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_G]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_H]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_I]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_J]
```

```
ALTER DATABASE Kardex  
ADD FILEGROUP [K_K]
```

```
ALTER DATABASE Kardex
```

```
ADD FILEGROUP [K_L]
```

- Creamos los archivos

```
ALTER DATABASE Kardex
ADD FILE
(
    NAME = bk_b,
    FILENAME = 'C:\bk_b.ndf',
    SIZE = 5MB,
    MAXSIZE = 10MB,
    FILEGROWTH = 5MB
)
TO FILEGROUP [K_B];
```

```
ALTER DATABASE Kardex
ADD FILE
(
    NAME = bk_c,
    FILENAME = 'C:\bk_c.ndf',
    SIZE = 5MB,
    MAXSIZE = 10MB,
    FILEGROWTH = 5MB
)
TO FILEGROUP [K_C];
```

```
ALTER DATABASE Kardex
ADD FILE
(
    NAME = bk_d,
    FILENAME = 'C:\bk_d.ndf',
    SIZE = 5MB,
    MAXSIZE = 10MB,
    FILEGROWTH = 5MB
)
TO FILEGROUP [K_D];
```

```
ALTER DATABASE Kardex
ADD FILE
(
    NAME = bk_e,
    FILENAME = 'C:\bk_e.ndf',
    SIZE = 5MB,
    MAXSIZE = 10MB,
    FILEGROWTH = 5MB
)
TO FILEGROUP [K_E];
```

```
ALTER DATABASE Kardex
ADD FILE
(
    NAME = bk_f,
    FILENAME = 'C:\bk_f.ndf',
    SIZE = 5MB,
```

## Rodriguez Balcazar David

```
        MAXSIZE = 10MB,  
        FILEGROWTH = 5MB  
    )  
    TO FILEGROUP [K_F];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_g,  
    FILENAME = 'C:\bk_g.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB  
)  
    TO FILEGROUP [K_G];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_h,  
    FILENAME = 'C:\bk_h.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB  
)  
    TO FILEGROUP [K_H];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_i,  
    FILENAME = 'C:\bk_i.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB  
)  
    TO FILEGROUP [K_I];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_j,  
    FILENAME = 'C:\bk_j.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB  
)  
    TO FILEGROUP [K_J];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_k,  
    FILENAME = 'C:\bk_k.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB
```

```
)  
TO FILEGROUP [K_K];  
  
ALTER DATABASE Kardex  
ADD FILE  
(  
    NAME = bk_1,  
    FILENAME = 'C:\bk_1.ndf',  
    SIZE = 5MB,  
    MAXSIZE = 10MB,  
    FILEGROWTH = 5MB  
)  
TO FILEGROUP [K_L];
```

- Creamos la función de partición que asigna las filas de una tabla o un índice a una partición específica según los valores de una columna especificada.

```
Create Partition Function [KardexPartition](date)  
As Range Left For Values  
( '01-02-2014', '01-03-2014', '01-04-2014', '01-05-2014', '01-06-2014', '01-07-  
2014', '01-08-2014', '01-09-2014', '01-10-2014', '01-11-2014' ) ;
```



- Creamos la tabla a la cual asociamos el esquema de particiones.

```
create table Kardex1  
(  
    idKardex int not null,  
    fecha date,  
    Calificacion int,  
    constraint pfKardex primary key (idKardex)  
)  
  
Create Clustered Index [Indexfecha] On [dbo].[Kardex] (fecha)  
on [KardexScheme] (fecha)
```

- Consulta para obtener las particiones de la tabla indicada

```
SELECT t.name AS TableName, i.name AS field, p.partition_number, r.value
      AS BoundaryValue , rows
      From Sys.Tables AS t Join Sys.Indexes AS i On
      t.object_id = i.object_id Join sys.partitions AS p On
      i.object_id = p.object_id
      And i.index_id = p.index_id Join sys.partition_schemes
      AS s On i.data_space_id = s.data_space_id Join
      sys.partition_functions
      AS f ON s.function_id = f.function_id Left Join
      sys.partition_range_values AS r On f.function_id = r.function_id
      and
      r.boundary_id = p.partition_number
Where t.name = 'kardex' and i.type <= 1 Order By p.partition_number;
```

Table Name	field	partition_number	Boundary Value	rows
kardex	Indefecha	1	2014-02-01 00:00:00.000	0
kardex	Indefecha	2	2014-03-01 00:00:00.000	0
kardex	Indefecha	3	2014-04-01 00:00:00.000	0
kardex	Indefecha	4	2014-05-01 00:00:00.000	0
kardex	Indefecha	5	2014-06-01 00:00:00.000	0
kardex	Indefecha	6	2014-07-01 00:00:00.000	0
kardex	Indefecha	7	2014-08-01 00:00:00.000	0
kardex	Indefecha	8	2014-09-01 00:00:00.000	0
kardex	Indefecha	9	2014-10-01 00:00:00.000	0
kardex	Indefecha	10	2014-11-01 00:00:00.000	0
kardex	Indefecha	11	NULL	0

- Ahora veremos toda informacion de las particiones

```
SELECT * FROM sys.partitions AS p
JOIN sys.tables AS t
ON p.object_id = t.object_id
WHERE p.partition_id IS NOT NULL
AND t.name = 'kardex';
```

partition_id	object_id	index_id	partition_number	hlob_id	rows	filestream_filegroup_id	data_compression	data_compression_desc	name	object_id	principal_id
1	72057594038576512	2105058535	1	72057594038576512	0	0	0	NONE	kardex	2105058535	NULL
2	72057594039042048	2105058535	2	72057594039042048	0	0	0	NONE	kardex	2105058535	NULL
3	72057594039107584	2105058535	3	72057594039107584	0	0	0	NONE	kardex	2105058535	NULL
4	72057594039173120	2105058535	4	72057594039173120	0	0	0	NONE	kardex	2105058535	NULL
5	72057594039238656	2105058535	5	72057594039238656	0	0	0	NONE	kardex	2105058535	NULL
6	72057594039304192	2105058535	6	72057594039304192	0	0	0	NONE	kardex	2105058535	NULL
7	72057594039369728	2105058535	7	72057594039369728	0	0	0	NONE	kardex	2105058535	NULL
8	72057594039435264	2105058535	8	72057594039435264	0	0	0	NONE	kardex	2105058535	NULL
9	72057594039500800	2105058535	9	72057594039500800	0	0	0	NONE	kardex	2105058535	NULL
10	72057594039566336	2105058535	10	72057594039566336	0	0	0	NONE	kardex	2105058535	NULL
11	72057594039631872	2105058535	11	72057594039631872	0	0	0	NONE	kardex	2105058535	NULL

Insertamos valores

```
insert into kardex values ('1', '03-02-2014', '80');
insert into kardex values ('2', '03-03-2014', '80');
insert into kardex values ('3', '03-04-2014', '80');
insert into kardex values ('4', '05-06-2014', '80');
insert into kardex values ('5', '03-07-2014', '80');
insert into kardex values ('6', '08-05-2014', '80');
```

- Revisemos los datos y la partición donde se encuentra cada uno de los registros con la siguiente instrucción

```
select *, $Partition.KardexPartition (fecha) as "Particion"
from kardex
```

	idKardex	fecha	Calificacion	Particion
1	1	2014-02-03	80	2
2	2	2014-03-03	80	3
3	3	2014-04-03	80	4
4	6	2014-05-08	80	5
5	4	2014-06-05	80	6
6	5	2014-07-03	80	7