**Example 21.1**

CREATE DATABASE sample2

ON PRIMARY

(NAME = sample2\_data,

FILENAME = 'C:\temp\sample2\_data.mdf', size=500MB),

FILEGROUP sample2\_fg CONTAINS MEMORY\_OPTIMIZED\_DATA

(NAME = sample2\_dir,

FILENAME = 'C:\temp\sample2\_dir')

LOG ON

(NAME = sample2\_log,

FILENAME='C:\temp\sample2\_log.ldf', size=500MB);

**Example 21.2**

ALTER DATABASE sample

ADD FILEGROUP sample\_fg CONTAINS MEMORY\_OPTIMIZED\_DATA;

GO

ALTER DATABASE sample

ADD FILE (NAME = sample\_dir, FILENAME = 'C:\temp\sample\_file')

TO FILEGROUP sample\_fg;

**Example 21.3**

USE sample2;

CREATE TABLE employee\_mem

( emp\_no int not null, emp\_lname CHAR(20) NOT NULL ,

emp\_fname CHAR(20) NOT NULL, dept\_no CHAR(4) NOT NULL,

PRIMARY KEY NONCLUSTERED HASH (emp\_no)

WITH (BUCKET\_COUNT = 1000))

WITH (MEMORY\_OPTIMIZED = ON, DURABILITY = SCHEMA\_AND\_DATA);

**Example 21.4**

CREATE TABLE employee\_mem2

( emp\_no int not null, emp\_lname CHAR(20) NOT NULL ,

emp\_fname CHAR(20) NOT NULL, dept\_no CHAR(4) NOT NULL,

PRIMARY KEY NONCLUSTERED (emp\_no) )

WITH (MEMORY\_OPTIMIZED = ON, DURABILITY = SCHEMA\_AND\_DATA);

**Example 21.5**

USE sample2;

CREATE TABLE employee\_mem4

(emp\_no int not null PRIMARY KEY NONCLUSTERED HASH WITH (BUCKET\_COUNT=1000),

emp\_lname CHAR(20) NOT NULL ,

emp\_fname CHAR(20) NOT NULL, dept\_no CHAR(4) NOT NULL,

INDEX i\_lname NONCLUSTERED (emp\_lname))

WITH (MEMORY\_OPTIMIZED = ON, DURABILITY = SCHEMA\_AND\_DATA);

**Example 21.6**

USE sample2;

CREATE TABLE project\_mem (project\_no INT NOT NULl PRIMARY KEY

NONCLUSTERED HASH WITH (BUCKET\_COUNT = 1024),

project\_name CHAR (20), budget DEC(8,2))

WITH (MEMORY\_OPTIMIZED = ON, DURABILITY = SCHEMA\_AND\_DATA);

**Example 21.7**

USE sample2;

GO

CREATE PROCEDURE dbo.increase\_budget\_mem (@percent INT=10)

WITH NATIVE\_COMPILATION, SCHEMABINDING, EXECUTE AS OWNER

AS BEGIN ATOMIC WITH

(TRANSACTION ISOLATION LEVEL = SNAPSHOT,LANGUAGE = N'us\_english')

UPDATE dbo.project\_mem

SET budget = budget + budget \* @percent/100

END

**Example 21.8**

SELECT OBJECTPROPERTY(OBJECT\_ID('sample2.dbo.employee\_mem'),

'TableIsMemoryOptimized');

**Example 21.9**

SELECT object\_id ,is\_memory\_optimized, durability, durability\_desc

FROM sys.tables WHERE name = 'employee\_mem';

**Example 21.10**

--Displaying space usage for a DB with at least one MEMORY\_OPTIMIZED file group

sp\_spaceused -- @objname ='employee\_mem',

@updateusage = 'FALSE',

@mode = 'ALL',

@oneresultset = '1',

@include\_total\_xtp\_storage = '1'

**Example 21.11**

SELECT OBJECT\_NAME(object\_id) table\_name,

memory\_allocated\_for\_table\_kb, memory\_allocated\_for\_indexes\_kb

FROM sys.dm\_db\_xtp\_table\_memory\_stats;

**Example 21.12**

CREATE RESOURCE POOL Pool\_mem WITH (MAX\_MEMORY\_PERCENT=50);

ALTER RESOURCE GOVERNOR RECONFIGURE;

**Example 21.13**

EXEC sp\_xtp\_bind\_db\_resource\_pool 'sample2', 'Pool\_mem';