

Task No: 9

Date: 07/10/25

Backing up and recovery in
databases.

Aim: To perform the backup and recovery scenarios.

- a) Recovering a NOARCHIVELOG database with Incremental Backups
- b) Restoring the server parameter File
- a) performing Recovery with a Backup control File.

Scenario 1: Recovering a NOARCHIVELOG Database with Incremental Backups.

Step 1: Backup Database

```
BACKUP DATABASE [database_name] TO DISK = "backup-file.bak"
WITH NOFORMAT, NOINIT, NAME = 'Full Database Backup',
SKIP, REWIND, NOUNLOAD, STATS=10.
BACKUP DATABASE [Banking] TO DISK = "backup-file.bak"
```

Step 2: Create Incremental Backup

```
BACKUP DATABASE [database_name] TO DISK = 'Incremental-
backup.bak' WITH DIFFERENTIAL, NOFORMAT, NONINIT,
NAME = 'Incremental Database Backup', SKIP, REWIND,
NOUNLOAD, STATS=10
BACKUP DATABASE [Banking] TO DISK = 'Incremental-backup.bak'
```

Step 3: Simulate Data Loss

Intentionally delete or modify data.

Step 4: Restore Database

```
RESTORE DATABASE [database_name] FROM DISK = 'backup-
file.bak' WITH REPLACE
RESTORE DATABASE [Banking] FROM DISK = 'backup-file.bak' WITH REPLACE.
```

Step 5: Apply Incremental Backup

```
RESTORE DATABASE [database_name] FROM DISK =
'Incremental-backup.bak' WITH REPLACE
RESTORE DATABASE [Banking] FROM DISK = 'Incremental-backup.bak'
```

Step 6: Recover Database

RECOVER DATABASE [database_name]

RECOVER DATABASE [Banking]

Step 7: Open Database

ALTER DATABASE [database_name] SET ONLINE

ALTER DATABASE [Banking] SET ONLINE

Scenario 2: Restoring the server parameter file (SPFILE)

Step 1: Backup SPFILE

BACKUP SERVER PARAMETER FILE TO FILE = 'spfile.bak';

Step 2: Simulate SPFILE LOSS

Delete or modify control file. SPFILE.

Step 3: Restore SPFILE

STARTUP MOUNT

RESTORE SERVER PARAMETER FILE FROM FILE = 'spfile.bak';

SHUTDOWN

STARTUP

Scenario 3: Restoring with a Backup Control File

Step 1: Backup Control File

BACKUP CONTROLFILE TO FILE = 'Controlfile.bak';

Step 2: Simulate Control File Loss

Delete or modify control file.

Step 3: Restore Control File

STARTUP MOUNT

RESTORE CONTROLFILE FROM FILE = 'Controlfile.bak';

ALTER CONTROLFILE REUSE;

Step 4: Recover Database


RECOVER DATABASE USING BACKUP CONTROLFILE;

Step 5: Open Database

ALTER DATABASE OPEN RESETLOGS;

SQL Server Commands:

- BACKUP DATABASE
- RECOVER DATABASE
- RESTORE DATABASE
- ALTER DATABASE
- BACKUP SERVER PARAMETER FILE
- RESTORE SERVER PARAMETER FILE
- BACKUP CONTROLFILE
- RESTORE CONTROLFILE.

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EX NO.	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	

Result:

The Backup and recovery in Databases were successfully executed.