Task 9: Backing up and recovery in database

Aim: To implement the Backing up and recovery in database

Perform following backup and recovery scenarios.

a) Recovering a NOARCHIVELOG Database with Incremental backups.

b) Restoring the server Parameter File

c) 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.

Step 2: Create Incremential Backup.

BACKUP DATABASE [database_name] TO DISK = 'Incremental.bak' WITH DIFFERENTIAL, NOFORMAT, NOINIT, NAME = 'Incremental Database Backup', SKIP, STATS = 10.

Step3: Simulate Data loss
- Intentionally delete or modify data.

Step 4: Restore Database

RESTORE DATABASE [database_name] FROM DISK = 'backup_file.bak' WITH RECOVERY

Step 6: Recover Database
RECOVER DATABASE [database name]

Step 7: open database
ALTER DATABASE [database name] SET ONLINE

Scenario 2: Restoring the server parameter file (SPFILE)

Step 1: Backup SPFILE
BACK UP SERVER PARAMETER FILE TO FILE = 'spfy.
bak';

Step 2: Simulate SPFILE loss
- Delete or modify SPFILE.

Step 3: Restore SPFILE
STARTUP MOUNT
RESTORE SERVER PARAMETER FILE FROM FILE =
'spfile.bak';

SHUTDOWN
STARTUP
Scenario 3: Performing Recovery 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 CONTORL FILE REUSE;

Step 4: Recover Database
RECOVER DATABASE USING BACKUP CONTROLFILE;

step5: open database.
ALTER DATABASE OPEN REST LOGS;

SQL server commands:
- BACKUP DATABASE
- RESTORE DATABASE
- RECOVER DATABASE
- ALTER DATABASE
- BACKUP SERVER PARAMETER FILE
- RESTORE SERVER PARAMETER FILE
- BACKUP CONTROLFILE
- RESTORE CONTROLFILE

Result: The implementation of backing up
and recovery in database has been
Executed successfully.