--Drop database BackupDatabase

--Create a test database

Use master

go

Create database BackupDatabase

go

use BackupDatabase

go

--Create table

Create table Products

(ProductID int IDENTITY (1,1) Primary Key,

ProductName varchar (100),

Brand varchar (100))

go

--Insert data into table

insert into Products values ('motor','chevy')

insert into Products values ('Hat','Nike')

insert into Products values ('Shoe','Payless')

insert into Products values ('Phone','Apple')

insert into Products values ('Book','Green')

insert into Products values ('Cup','Large')

--View data

select \* from Products

--Take full database backup of six rows

BACKUP DATABASE [BackupDatabase]

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH NOINIT, --<< No override

NAME = N'BackupDatabase-Full Database Backup',

STATS = 10

GO

--Insert data into table AFTER a full database backup, but before a transactional log backup

Insert into Products values ('Doll','Toy\_R\_us')

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

Insert into Products values ('House','Remax')

--another transaction log backup

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

Insert into Products values ('Car','Porche')

--Taking differential backups

BACKUP DATABASE [BackupDatabase]

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH DIFFERENTIAL ,

NOINIT,

NAME = N'BackupDatabase-Differential Database Backup',

STATS = 10

GO

Insert into Products values ('Chair','Walmart')

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

Insert into Products values ('Mouse','Apple')

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

Insert into Products values ('TV','Sony')

BACKUP DATABASE [BackupDatabase]

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH DIFFERENTIAL ,

NOINIT,

NAME = N'BackupDatabase-Differential Database Backup',

STATS = 10

GO

Insert into Products values ('Phone','Apple')

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

--Look insde the .bak file

RESTORE HEADERONLY FROM DISK = N'c:\fullbackups\BackupDatabase.bak'

--Restore database using T SQL

--before restoring a database, if you can, take a very last transactional log backup to save data:

--tail log

USE master

GO

BACKUP LOG BackupDatabase

TO DISK = N'c:\fullbackups\BackupDatabase.bak'

WITH NORECOVERY,

NAME = N'BackupDatabase-Transaction Log Backup',

STATS = 10

GO

USE [master]

Go

RESTORE DATABASE [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 1,

NORECOVERY,

NOUNLOAD,

STATS = 5

RESTORE DATABASE [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 7,

NORECOVERY,

NOUNLOAD,

STATS = 5

RESTORE LOG [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 8,

NORECOVERY,

NOUNLOAD,

STATS = 5

RESTORE LOG [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 9,

RECOVERY,

NOUNLOAD,

STATS = 5

GO

RESTORE LOG [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 10,

NORECOVERY,

NOUNLOAD,

STATS = 5

GO

RESTORE LOG [BackupDatabase]

FROM DISK = N'C:\FullBackups\BackupDatabase.bak'

WITH FILE = 11,

RECOVERY,

NOUNLOAD,

STATS = 5

GO