/\*

1. In database Base\_24 create tables: Table\_24 (parent table) and Table\_242 (dependent table).

Establish relationship between these tables. Define mode, when changing primary key value in parent table,

the foreign key values in corresponding rows in dependent table will be changed too. Define mode,

when deleting rows from parent table, the corresponding rows from dependent table will be deleted too.

The table Table\_24 contains columns: table24\_ID, col\_24 and col\_25 have integer type.

The table Table\_242 contains columns: table242\_ID and table24\_ID have integer type,

and col\_26 and col\_27 have Unicode character data type, that has fixed size and contains 24 characters. (5 points)

\*/

use Base\_24

-- Creating the parent table Table\_24

CREATE TABLE Table\_24 (

table24\_ID INT PRIMARY KEY,

col\_24 INT,

col\_25 INT

);

-- Creating the dependent table Table\_242

USE Base\_24;

CREATE TABLE Table\_242

(

table243\_ID INT PRIMARY KEY IDENTITY (1,1),

table24\_ID INT REFERENCES Table\_24(table24\_ID) ON UPDATE CASCADE ON DELETE CASCADE,

col\_26 NCHAR(24),

col\_27 NCHAR(24)

);

-- 2. a. In database Base\_24 add new column col\_28 to the table Table\_24, which has constraint UNIQUE named as col\_24\_unique.

USE Base\_24;

ALTER TABLE Table\_24

ADD col\_28 INT,

CONSTRAINT col\_24\_unique UNIQUE (col\_28);

--b. Delete constraint col\_24\_default from the table Table\_24.

USE Base\_24;

ALTER TABLE Table\_24

DROP CONSTRAINT col\_24\_default;

--3. In database Base\_24 create view View\_24, in which appears the values of columns col\_24 and col\_25 of table Table\_24.

--In view should be appear the rows for which values of column col\_24 are greater than or

--equal to 240 or values of column col\_25 are less than or equal to 244.

USE Base\_24;

GO

CREATE VIEW View\_24

AS

SELECT col\_24, col\_25

FROM Table\_24

WHERE col\_24 >= 240 and col\_25 <= 244;

--b. Rename the view View\_24, new name is View\_241.

USE Base\_24;

EXEC sp\_rename 'View\_24', 'View\_241';

--c. Open the view View\_241.

USE Base\_24;

SELECT \* FROM View\_241;

--4.a. Create not unique, nonclastered index Ind\_col\_24 for column col\_24 of the table Table\_24.

USE Base\_24;

CREATE NONCLUSTERED INDEX Ind\_col\_24

ON Table\_24 (col\_24);

--b. Delete index Ind\_col\_24 of the table Table\_24. (5 points, 3-2)

USE Base\_24;

DROP INDEX Ind\_col\_24

ON Table\_24;

--5 a. Create the Operator\_24 operator, which will be sent a notification on pager from Monday

--to Sunday from 01:07 to 00:36. Operator\_24 is not active.

use msdb;

exec sp\_add\_operator @name = 'Operator\_24',

@enabled = 0,

@pager\_address = 'oper24@pageraddress.com',

@weekday\_pager\_start\_time = 010700,

@weekday\_pager\_end\_time = 003600,

@pager\_days = 127;

--b. Change status of the Operatori\_24

--operator so, that he (she) can receive notifications on E-mail and pager on Tuesday, Thursday

--and Friday from 14:35 to 23:12. Enable this operator.

USE msdb;

EXEC sp\_update\_operator @name = 'Operator\_24', @enabled = 1,

@weekday\_pager\_start\_time = 143500,

@weekday\_pager\_end\_time = 231200,

@pager\_days = 52;

--6 a. Create the Alert\_24 alert. The alert is active. An error text will be included in a message

--that should be sent on pager. The error number is 9024. The delay between responses is 240

--seconds. Define the notification message. The error must occur in the Base\_24 database for the

--alert to fire. The Job\_24 job be executed in response to this alert.

USE msdb;

EXEC sp\_add\_job @job\_name = N'Job\_24';

EXEC sp\_add\_jobserver

@job\_name = 'Job\_24',

@server\_name = '(LOCAL)';

EXEC sp\_add\_alert @name = 'Alert\_24',

@enabled = 1,

@message\_id = 9024,

@notification\_message = N'There is an error',

@delay\_between\_responses=240,

@database\_name = 'Base\_24',

@job\_name = N'Job\_24';

--b. Change the Alert\_24 alert.

--Make alert active not active. An error text must not be included in a message. The new value

--of severity level is 004. The new value of delay between responses is 40 seconds. The error

--must occur in the Base\_4 database for the alert to fire. The Job\_4 job must be executed in

--response to this alert.

EXEC dbo.sp\_update\_alert

@enabled=0,

@name = N'Alert\_24',

@include\_event\_description\_in = 0,

@severity = 4,

@delay\_between\_responses=40,

@database\_name = 'Base\_4',

@job\_name = N'Job\_4';

--7. a. Create the Job\_24 job. The job is active. Always delete the job. The job’s owner is Login\_24.

--The job always sends a notification about the completion of a task in Windows NT Application

--Log. The job always sends notification to the Operator\_24 operator by email. Define

--email\_name of operator.

USE msdb;

CREATE LOGIN Login\_24 WITH PASSWORD = 'PASS';

USE msdb;

EXEC sp\_add\_job

@job\_name = N'Job\_24',

@enabled = 1,

@description = 'Job\_24',

@owner\_login\_name = N'Login\_24',

@delete\_level = 3,

@notify\_level\_eventlog = 3,

@notify\_level\_email = 3,

@notify\_email\_operator\_name = N'Operator\_24';

--b. Change the Job\_24 job. Disable the job. Delete the job, if the task

--is completed successfully. The job’s owner is Login\_2. The job sends notification about the

--completion of a task in Windows NT Application Log, if the task is completed successfully.

--The job sends notification to the Operator\_2 operator by email, if the task is completed

--successfully. Define email\_name of operator. (5 points, 3-2)

EXEC dbo.sp\_update\_job

@job\_name = N'Job\_24',

@enabled = 0,

@delete\_level = 1,

@description = 'Job\_24',

@owner\_login\_name = N'Login\_2',

@notify\_level\_eventlog = 1,

@notify\_level\_email = 1,

@notify\_email\_operator\_name = N'Operator\_2';

--8. a. Add a disk backup device named Base\_24\_Backup, with the physical name

--'D:\SQL\Backup\_24\Base\_24\_Backup.bak' for the database Base\_24.

USE master;

EXEC sp\_addumpdevice 'disk', 'Base\_24\_Backup', 'D:\SQL\Backup\_24\Base\_24\_Backup.bak';

--b. Create full backup for

--the database Base\_24. Create backup of the files: PFile241, PFile242, PFile243, PFile244,

--PFile245 and PFile246, and filegroups: PRIMARY, Group\_241 and Group\_242, for the

--database Base\_24 (files and filegroups must exists). c. Restore the database Base\_24 from files

--and filegroups backup. (5 points, 1-2-2)

USE master;

EXEC sp\_addumpdevice 'disk', 'Base\_24\_Backup', 'D:\SQL\Backup\_24\Base\_24\_Backup.bak';

BACKUP DATABASE Base\_24 TO Base\_24\_Backup;

USE Base\_24;

BACKUP DATABASE Base\_24

FILE = 'PFile241',

FILE = 'PFile242',

FILE = 'PFile243',

FILE = 'PFile244',

FILE = 'PFile245',

FILE = 'PFile246',

FILEGROUP = 'PRIMARY',

FILEGROUP = 'Group\_241',

FILEGROUP = 'Group\_242'

TO Base\_24\_Backup;

USE Master;

RESTORE DATABASE Base\_24

FILE = 'PFile241',

FILE = 'PFile242',

FILE = 'PFile243',

FILE = 'PFile244',

FILE = 'PFile245',

FILE = 'PFile246',

FILEGROUP = 'PRIMARY',

FILEGROUP = 'Group\_241',

FILEGROUP = 'Group\_242'

FROM Base\_24\_Backup WITH FILE = 1, NORECOVERY, REPLACE;

RESTORE DATABASE Base\_24 FROM Base\_24\_Backup WITH FILE = 1, RECOVERY, REPLACE;