**SQL Server Instructies**

**Snapshot** (Deel 3, Oefenbundel 1)

CREATE DATABASE snapshot\_naam

ON

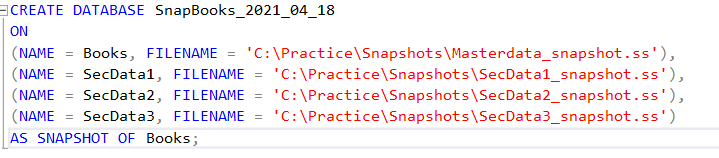
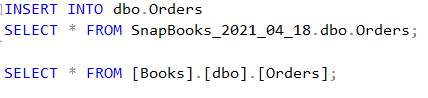
(

NAME = filename\_database,

FILENAME = ‘filename\_snapshot’

) [,…n]

AS SNAPSHOT OF originalDBname[;]

* **Vb:** 
* **Records recupereren**
* **Database restoren**



**Transaction log** (Deel 3, Oefenbundel 2)

SELECT

[Current LSN],

[Operation],

[Transaction ID],

[Previous LSN],

[AllocUnitName],

[Previous Page LSN],

[Page ID],

[XACT ID],

[Begin Time],

[End Time]

FROM

sys.fn\_dblog (NULL, NULL);

**Back-up en restore** (Deel 3, Oefenbundel 3)

* Full back-up => Overwrite
* Differential back-up => Append
* Transaction log back-up => Append
* **Back-up verifiëren**

Databases => Server Objects => Backup Devices

**Point-in-Time restore**

* Transaction log
* restore

**Login**

* **Login creëren (query)**

USE master;

CREATE LOGIN SmithB WITH PASSWORD='Pa$$word';

* **Login creëren (GUI)**

Security => Logins => new login

**Database User**

* **Database user aanmaken**

USE AdventureWorks2019;

CREATE USER MorrisL FOR LOGIN [DESKTOP-STV76HR\MorrisL];

**Database roles**

* **Aanmaken van de rol**  
  USE [databasename];  
  CREATE ROLE MyDbRole AUTHORIZATION [owner\_name];
* **Permissies toekennen aan de rol** (enkel database-level permissies)  
  GRANT [permission] TO MyDbRole;
* **Gebruik onderstaande instructie om een lijst van permissies op te vragen**  
  SELECT \*   
  FROM sys.fn\_builtin\_permissions('DATABASE')   
  ORDER BY permission\_name;
* **Database rol toekennen**

USE AdventureWorks2019;

EXEC sp\_addrolemember 'db\_datareader', 'MorrisL';

**of**

Database => Security => Roles => Database roles => properties

**Server roles**

* **Aanmaken server rol**

CREATE SERVER ROLE MyServerRole;

* **Permissie toekennen aan rol**

GRANT [permission] TO MyServerRole;

* **Database creatie**

USE MASTER;

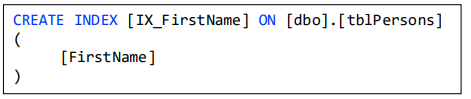
GRANT CREATE ANY DATABASE TO [DESKTOP-STV76HR\MorrisL];

USE MASTER;

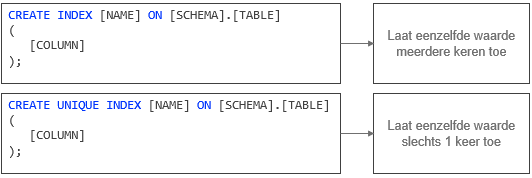
REVOKE CREATE ANY DATABASE TO […\MorrisL];

USE MASTER;

DENY CREATE ANY DATABASE TO […\MorrisL]; (=> nog lid van server role)

**Index**

* Unique index



**Controleer fragmentatie**

SELECT \*

FROM

sys.dm\_db\_index\_physical\_stats(

(SELECT DB\_ID('Sales5')),

(SELECT OBJECT\_ID('Sales5.dbo.Customers')),

NULL,

NULL,

NULL

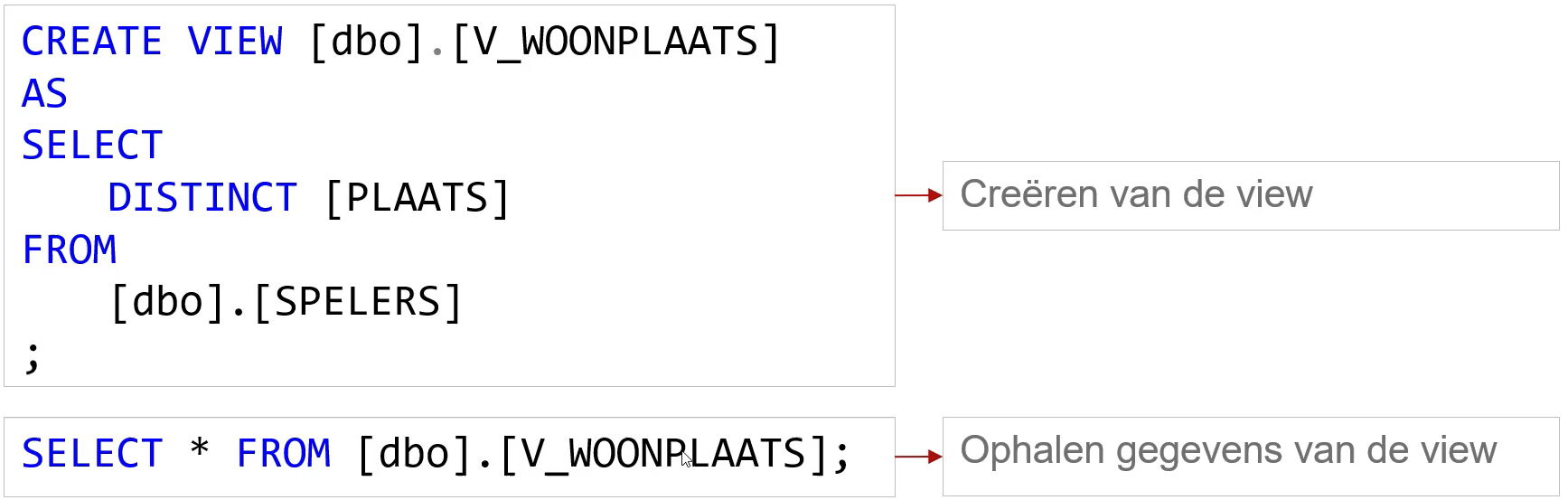
);

**Views**

* **View creatie**

CREATE VIEW [schema\_name.] view\_name [(column\_name [,...n])]

AS **<select\_statement>**

**Vb:**

* **Verwijderen**

DROP VIEW [ IF EXISTS ] [schema\_name.] view\_name

* **Aanpassen**

ALTER VIEW [schema\_name.] view\_name

AS select\_statement

*naam van view aanpassen? => best view verwijderen en terug aanmaken*

**Stored procedures**

* **creatie**

CREATE OR ALTER { PROC | PROCEDURE }  
 [schema\_name.] procedure\_name

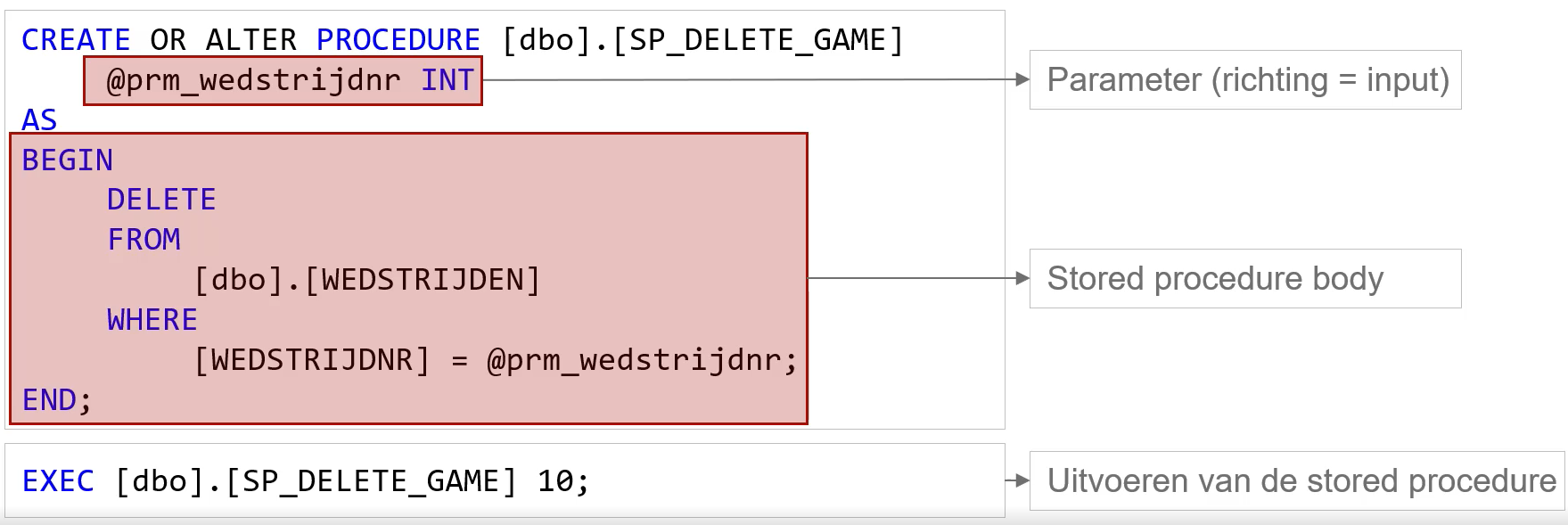
[ { @parameter data\_type }

[ = default ] [ OUT | OUTPUT | [READONLY]

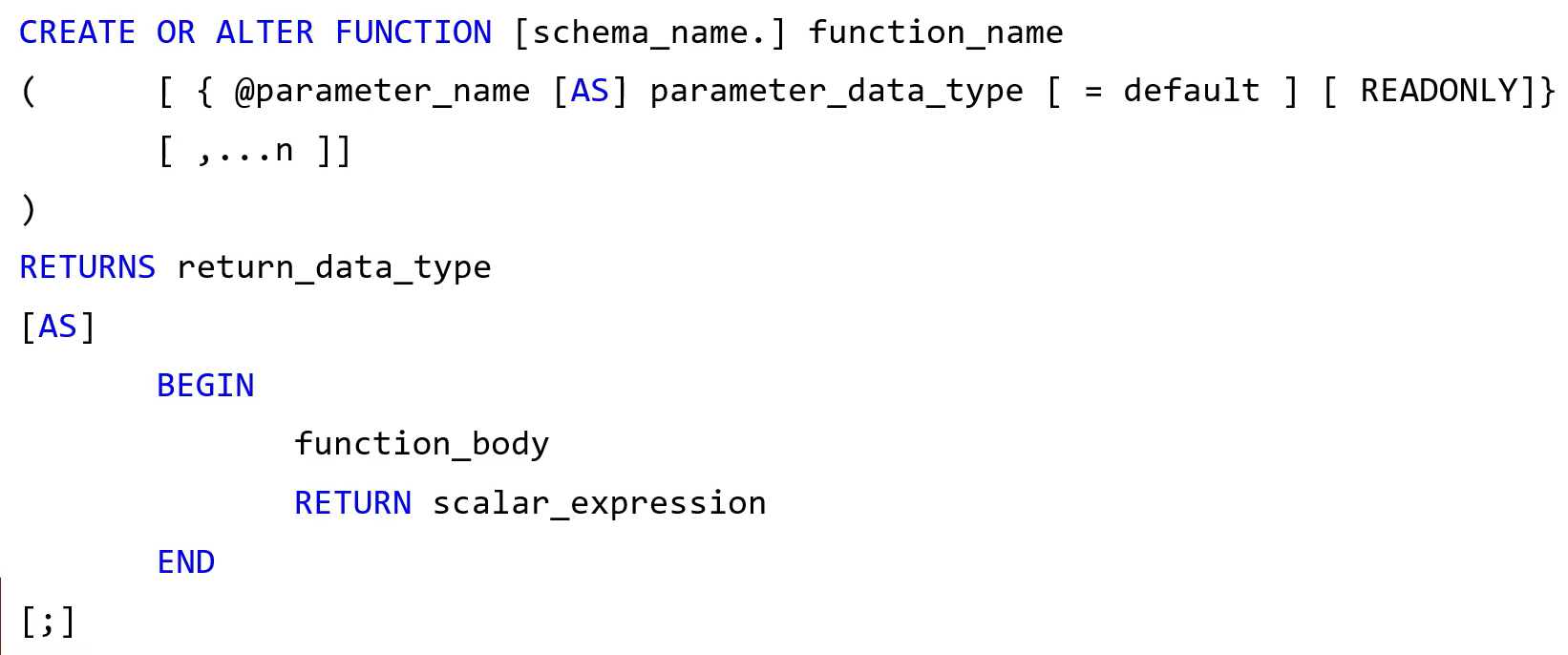
] [ ,...n ]

AS { [ BEGIN ] sql\_statement [;] [ ...n ] [ END ] }

[;]

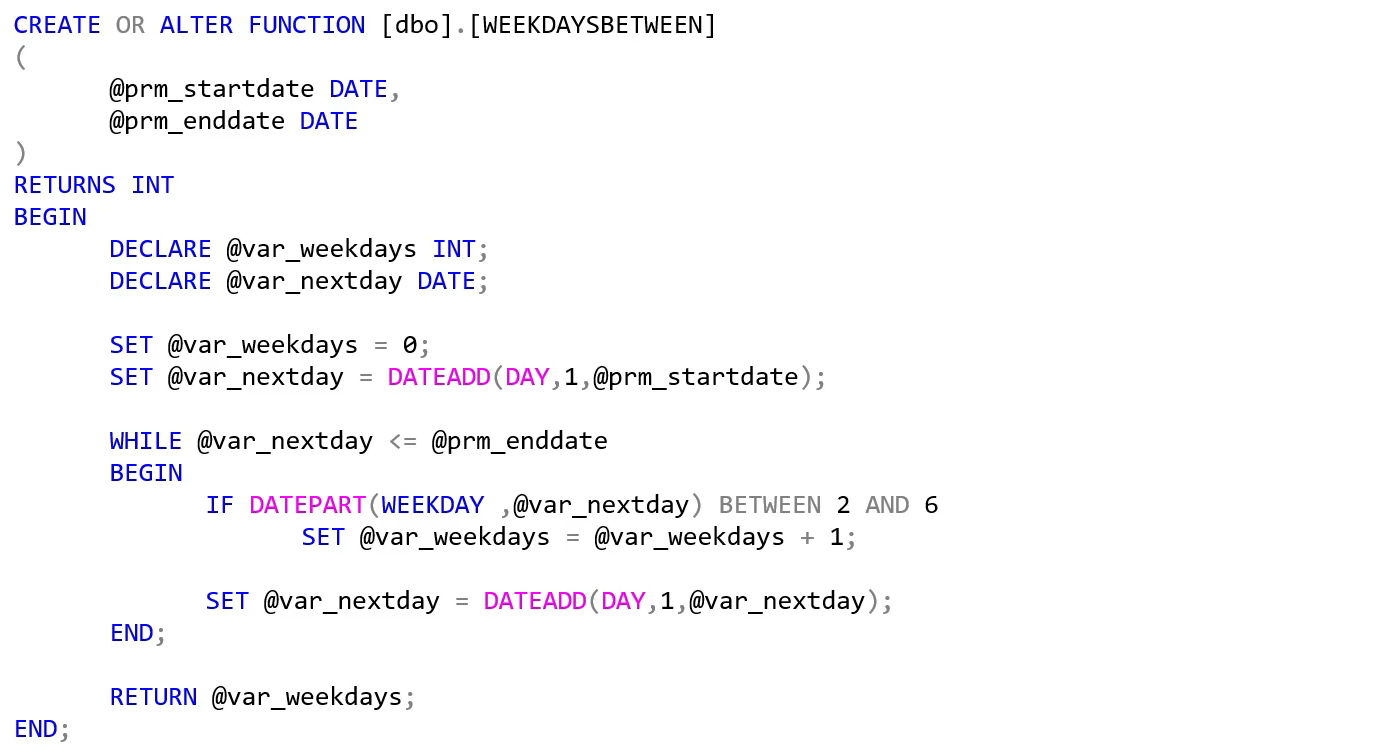
**Vb:**

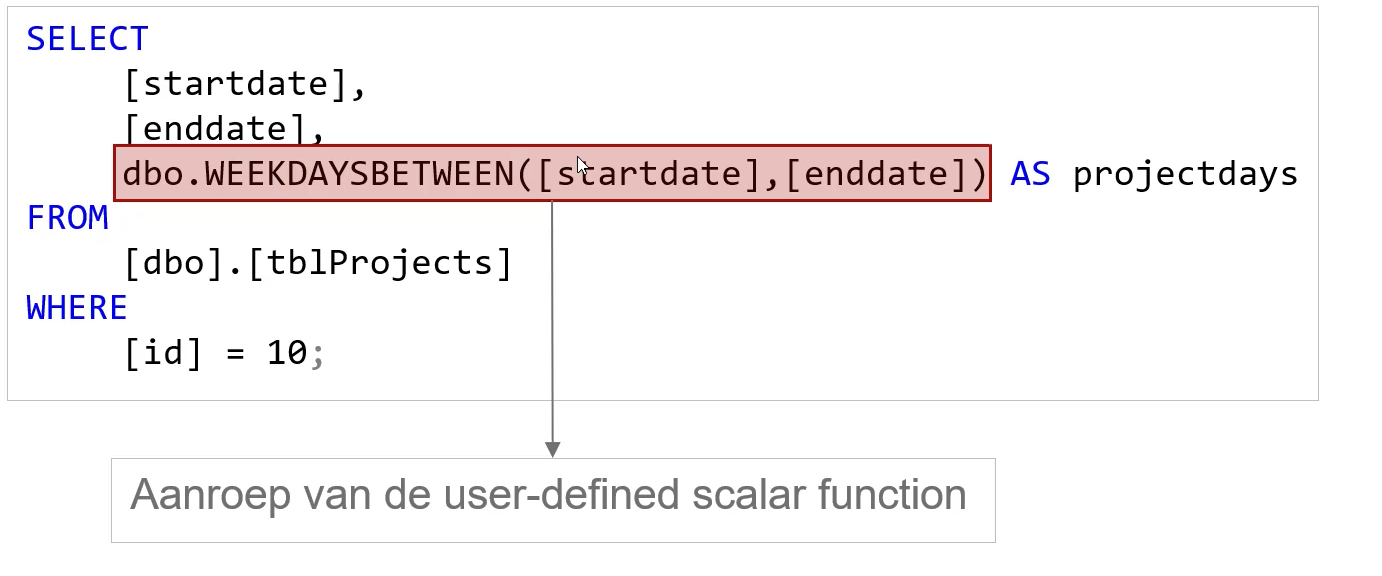
**Scalaire functies**

* **creatie**

**Vb:**

* Een functie die het aantal weekdagen tussen een tijdspanne berekent
* Twee datums als input (begin- en einddatum)
* Geeft een geheel getal terug



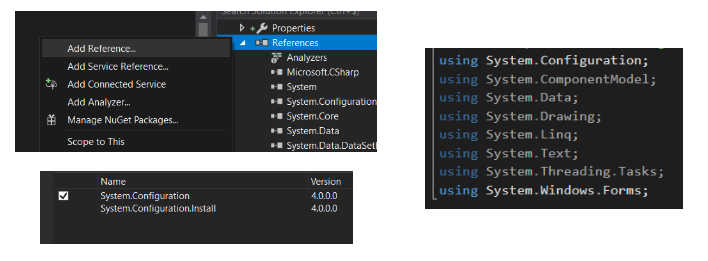
* **Gebruiken**

**Connectionstring**

* **Connectionstring bewaren**
* <connectionStrings> sectie toevoegen
* In deze sectie
  + <clear/> element als eerste toevoegen indien je geen COnnectionstrings wil overnemen uit overkoepelende .config files
  + Per Connectionstring een element toevoegen met de tag <add
  + Twee properties in dit element instellen: “name” en “connectionString”



* **Connectionstring ophalen**
  + Reference toevoegen in project naar System.Configuration
  + Using statement toevoegen voor System.Configuration
  + Gebruik ConnectionStrings property van ConfigurationManager object



**CLR activeren**

* CLR moet geactiveerd worden vooraleer er gebruik van gemaakt kan worden
* Moet in elke SQL Server instance die er gebruik van zal maken
* Activeren mbv stored procedure sp\_configure()

