

SQL Tutorial



SQL

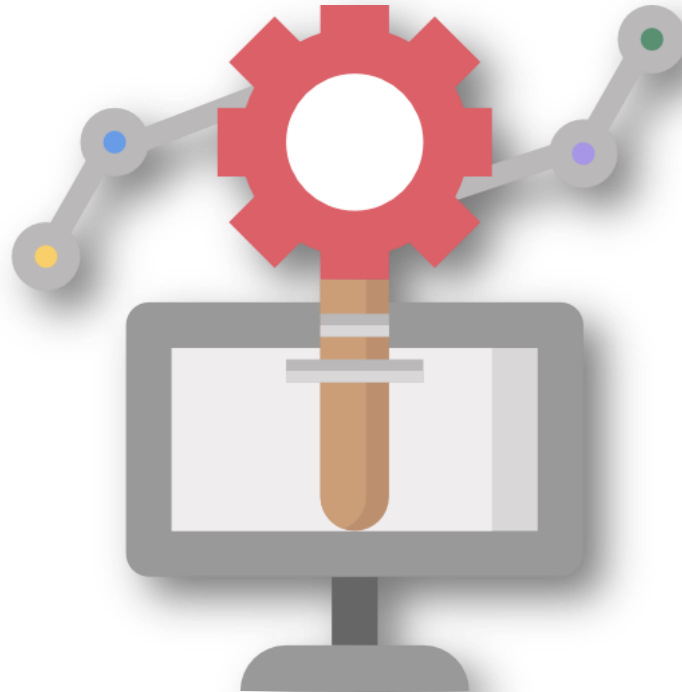
Agenda

- 1 Stored Procedure
- 2 Create View
- 3 Drop View
- 4 Transactions in SQL
- 5 Exception Handling

e_id	e_name	e_salary	e_age	e_gender	e_dept
1	Sam	95000	45	Male	Operations
2	Bob	80000	21	Male	Support
3	Anne	125000	25	Female	Analytics
4	Julia	73000	30	Female	Analytics
5	Matt	159000	33	Male	Sales
6	Jeff	112000	27	Male	Operations

Stored Procedure in SQL

STORED PROCEDURE is a prepared SQL code which can be saved and reused.



Stored Procedure without Parameter: Syntax



Let's create a
**stored
procedure!**

```
CREATE PROCEDURE procedure_name  
AS  
sql_statement  
GO;
```



```
EXEC procedure_name
```

Stored Procedure with Parameter: Syntax



```
CREATE PROCEDURE procedure_name  
@param1 data-type, @param2 data-type  
AS  
sql_statement  
GO;
```

Views

View is a virtual table based on the result of an SQL statement.

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Employee Table



	e_id	e_name	e_salary	e_age	e_gender	e_dept
1	3	Anne	125000	25	Female	Analytics
2	4	Julia	112000	30	Male	Analytics

"Female_Employee" View

Create View: Syntax



```
CREATE VIEW view_name  
AS  
SELECT column1, column2,...  
FROM table_name  
WHERE condition;
```

Drop View: Syntax



```
DROP VIEW view_name;
```


Transactions in SQL

Transaction is a group of commands that change the data stored in a database.

```
begin try
  begin transaction
    update employee set e_salary=50
  where e_gender='Male'
    update employee set
  e_salary=195/0 where e_name='Female'
  commit transaction
  Print 'transaction committed'
end try
begin catch
  rollback transaction
  print 'transaction rolledback'
end catch
```

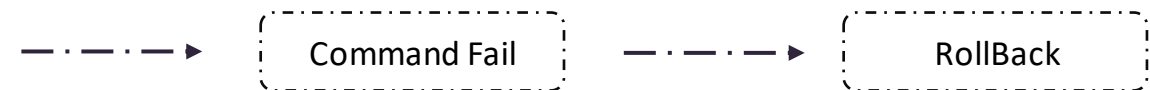


Single Unit

Transactions in SQL

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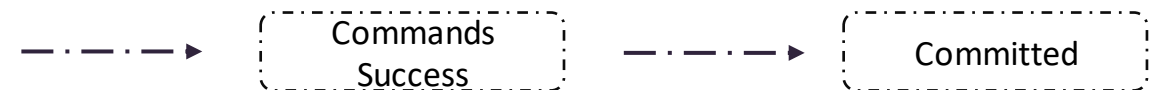
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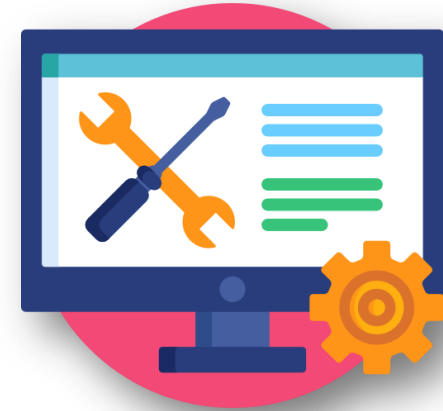
Exception Handling

An error condition during a program execution is called an exception.



Exception

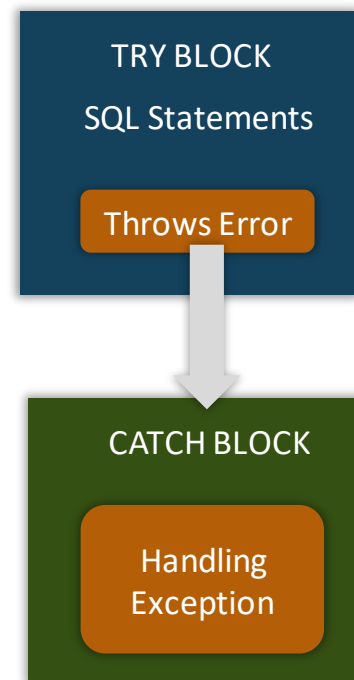
The mechanism for resolving such an exception is exception handling.



Exception Handling

Try/Catch

SQL provides try/catch blocks for exception handling.



Try/Catch: Syntax



BEGIN TRY

SQL Statements

END TRY

BEGIN CATCH

- Print Error OR
- Rollback Transaction

END CATCH

Quiz

What makes stored procedures faster than sending a Transact-SQL statement to SQL Server?

A

They are not faster

B

The query plan is compiled & cached on the server

C

The transact-SQL statements are shorter

D

There are less commands available, so parsing time is shorter



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Which of these is the syntax for creating a view?

A

Create view as select

B

Create view as update

C

Drop view as select

D

Create view as insert



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Which of the following can be characteristic(s) of a view?

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A view can include WHERE statements

B

A view can be permanently saved in the database as a table

C

A view can include joins between more than one table

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All of the above



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Quiz

..... marks the end of a successful implicit or explicit transaction

A

Commit transaction

B

Rollback transaction

C

Commit work

D

All of the above



Solution

..... marks the end of a successful implicit or explicit transaction

A

Commit transaction

B

Rollback transaction

C

Commit work

D

All of the above



Thank You