T-SQL static code analysis: Multiline blocks should be enclosed in BEGIN...END blocks

1-2 minutes

BEGIN...END can be omitted from a one-line block, such as with an IF statement or WHILE loop, but doing so can be misleading and induce bugs.

This rule raises an issue when the indentation of the lines after a one-line block indicates an intent to include those lines in the block, but the omission of BEGIN...END means the lines will be unconditionally executed once.

Noncompliant Code Example

IF (0=1)

EXEC firstActionInBlock;

EXEC secondAction; -- Noncompliant; executed unconditionally

EXEC thirdAction;

IF (0=1) EXEC firstActionInBlock; EXEC secondAction; -- Noncompliant; secondAction executed unconditionally

IF (0=1) EXEC firstActionInBlock; -- Noncompliant EXEC secondAction; -- Executed unconditionally

Compliant Solution

```
IF (0=1) BEGIN

EXEC firstActionInBlock;

EXEC secondAction;

END

EXEC thirdAction;
```

See

- MITRE, CWE-483 Incorrect Block Delimitation
- CERT, EXP52-J. Use braces for the body of an if, for, or while statement