



Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your T-SQL code

All rules 80

🔒 Vulnerability ①

 Bug (16)

 Security Hotspot 

☢ Code Smell (59)

Tags

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Queries that use "TOP" should have an "ORDER BY"

Analyze your code

 Bug  Major  ?  sql

Using TOP in a SELECT without ordering the results from which the "top" results are chosen will return a seemingly random set of rows, and is surely a mistake.

The same random behavior also occurs when using TOP in a DELETE, INSERT, UPDATE and MERGE.

Noncompliant Code Example

```
SELECT TOP 10 -- Noncompliant selects 10 random rows
    fname, lname, city
FROM people
WHERE city IS NOT NULL;
```

```
DELETE TOP (10) -- Noncompliant deletes 10 random rows
FROM PurchaseOrder
WHERE DueDate < '20020701';
```

Compliant Solution

```
SELECT TOP 10
    fname, lname, city
FROM people
WHERE city IS NOT NULL
ORDER BY birthdate;

DELETE
FROM PurchaseOrder
WHERE OrderID IN (
    SELECT TOP 10
        OrderID
    FROM PurchaseOrder
    WHERE DueDate < '20020701'
    ORDER BY DueDate ASC
);
```

Available In:

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