

CIS560

Data Modification Part 3



Data Modification

- We've looked at all three operations for writing data:
 - Inserting (INSERT statement)
 - Updating (UPDATE statement)
 - Deleting (DELETE and TRUNCATE statements)
- Now we'll look at a way to combine operations.
- The MERGE statement allows you to INSERT and UPDATE in a single statement.



MERGE

- Syntax

```
MERGE <target table>
USING <source table> ON <predicate>
[ WHEN MATCHED [ AND <predicate> ] THEN
  <UPDATE or DELETE statement> ] [ ...n ]
[ WHEN NOT MATCHED [ AND <predicate> ] THEN
  <INSERT statement> ] [ ...n ]
```

- WHEN MATCHED and WHEN NOT MATCHED are optional.
- Can include predicates for evaluating matches.
 - Common scenario is to check for changes.



OUTPUT

- OUTPUT clause will return information about the affected rows.
- It's supported on all DML statements.
- With MERGE, it provides an \$action function.

This allows you to see which operation was performed on each row.
- Can capture output into another table.

This output table must not have any relationships.

