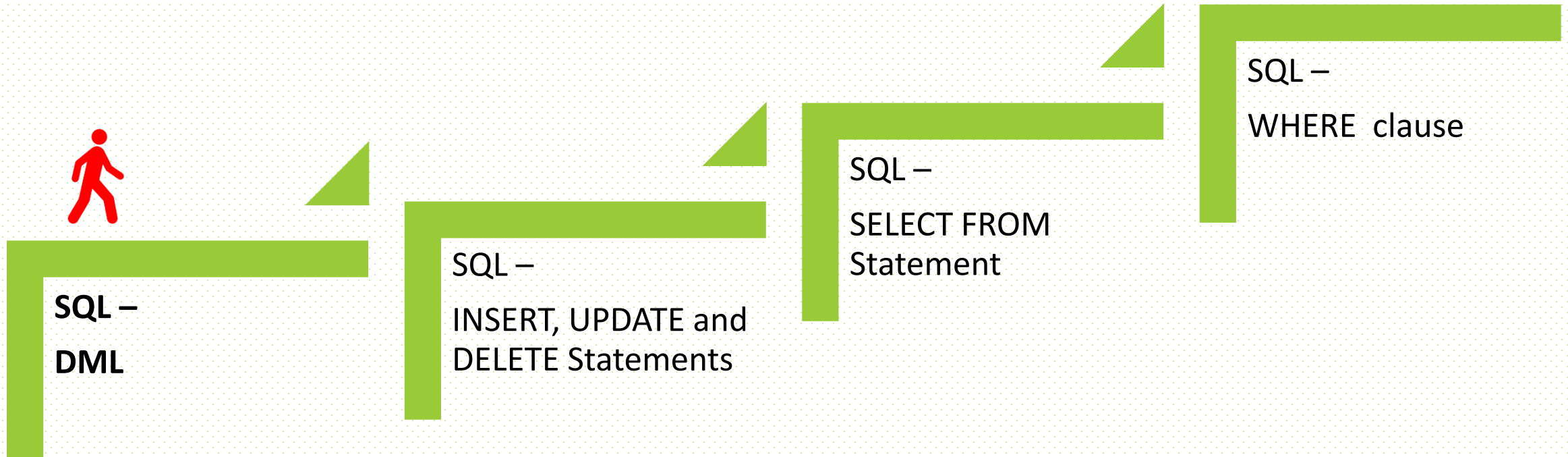


SQL

Session - 03

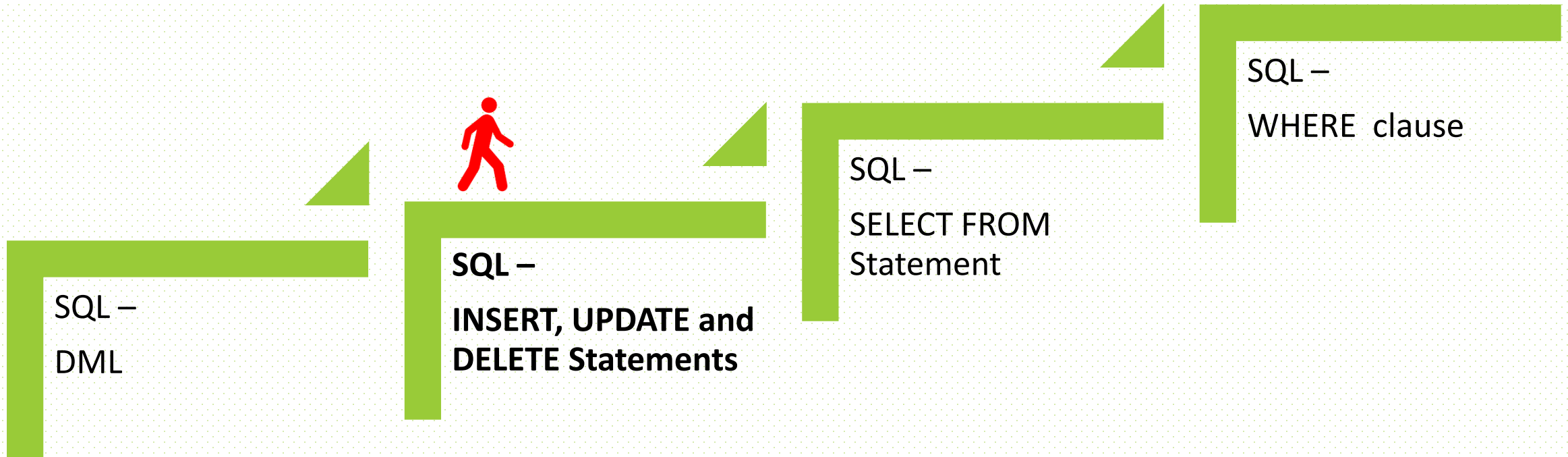
Learning Objectives



SQL – Data Manipulation Language

- The functional capability of DML is organized in manipulation commands like SELECT, UPDATE, INSERT INTO and DELETE FROM, as described below:
 - SELECT: This command is used to retrieve rows from a table. The syntax is SELECT [column name(s)] from [table name] where [conditions]. SELECT is the most widely used DML command in SQL.
 - UPDATE: This command modifies data of one or more records. An update command syntax is UPDATE [table name] SET [column name = value] where [condition].
 - INSERT: This command adds one or more records to a database table. The insert command syntax is INSERT INTO [table name] [column(s)] VALUES [value(s)].
 - DELETE: This command removes one or more records from a table according to specified conditions. Delete command syntax is DELETE FROM [table name] where [condition].

Learning Objectives



SQL – INSERT Statement

Syntax

- Specifying both the column names and the values to be inserted

```
INSERT INTO <table-name> (column1, column2, column3, ...)  
VALUES (value1, value2, value3, ...);
```

- If adding values for all the columns of the table, no need to specify the column names in the SQL query. However, make sure the order of the values is in the same order as the columns in the table.

```
INSERT INTO <table-name>  
VALUES (value1, value2, value3, ...);
```

SQL – UPDATE Statement

Syntax

```
UPDATE <table-name>  
SET column1 = value1, column2 = value2, ...  
WHERE condition;
```

Be careful when updating records. If you omit the WHERE clause, ALL records will be updated!

SQL – DELETE Statement

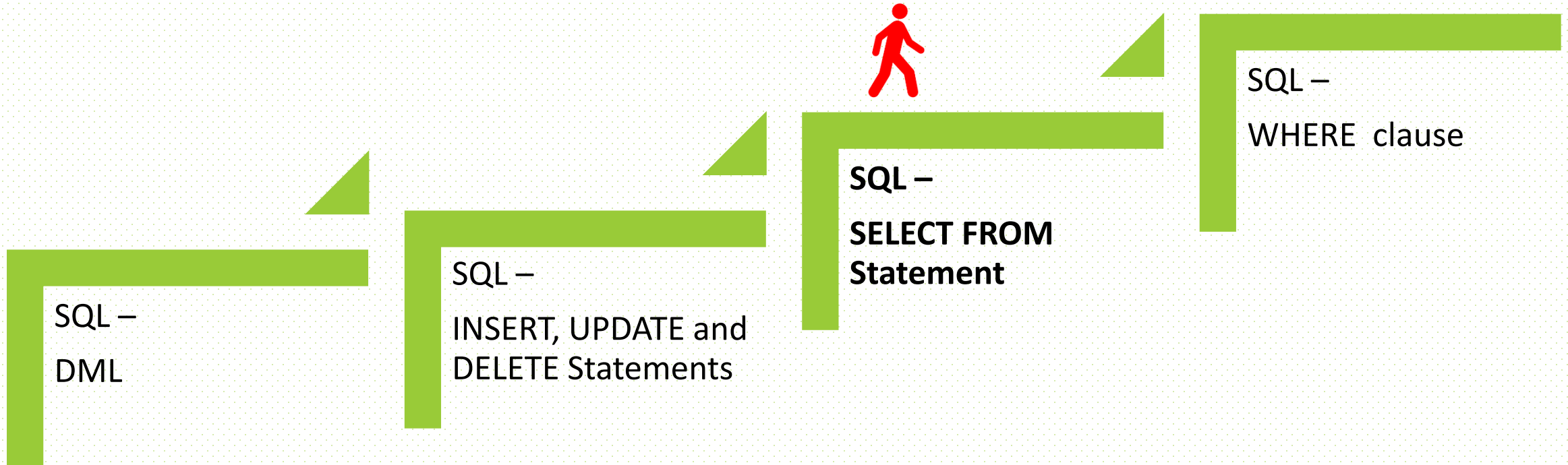
Syntax

```
DELETE FROM <table-name>  
WHERE condition;
```

```
DELETE FROM <table-name>;  
OR  
DELETE * FROM <table-name>;
```

Be careful when deleting records. If you omit the WHERE clause, ALL records will be deleted!

Learning Objectives



SQL – SELECT Statement

Syntax

- The **SELECT** statement is used to select data **FROM** a database.
- Selects all the columns from the table.

```
SELECT * FROM <table-name>;
```

- Selects specific columns from the table.

```
SELECT column1, column2, ...  
FROM <table-name>;
```

SQL – SELECT INTO Statement

Syntax

- The SELECT INTO statement copies data from one table into a new table.

```
SELECT *  
INTO <new-table> [IN <external-db>]  
FROM <old-table>  
WHERE condition;
```

```
SELECT column1, column2, column3, ...  
INTO <new-table> [IN <external-db>]  
FROM <old-table>  
WHERE condition;
```

Learning Objectives



SQL –
DML

SQL –
INSERT, UPDATE and
DELETE Statements

SQL –
SELECT FROM
Statement

SQL –
WHERE clause

SQL – WHERE Clause

Syntax

- The **WHERE** clause is used to filter records. The WHERE clause is used to extract only those records that fulfill a specified condition.
- The data returned is stored in a result table, called the **RESULT-SET**.

```
SELECT column1, column2, ...  
FROM <table-name>  
WHERE condition;
```

SQL - Tasks

Task 1 – Insert data into all the tables.

Task 2 – Update city for customer with cust_id 101.

Task 3 – Delete customer with cust_id 101.

Task 4 – Delete all values from customer table.

Task 5 – Delete all values from customer table and refresh the auto_increment counter to start.