**SQL**

**SELECT**
Description: Used to select data from a database table. If `DISTINCT` is used, no duplicate rows are returned.

**Syntax (without `DISTINCT`):**
SELECT column(s)
FROM table;

**Syntax (with `DISTINCT`):**
SELECT DISTINCT column(s)
FROM table;

**WHERE**
Description: Used to filter records, returning only those which meet provided conditions.

**Syntax:**
SELECT column(s)
FROM table
WHERE condition(s);

**Condition types:**
- =, >, >=, <, <=
- <> (not equal)
- BETWEEN min AND max
- LIKE %pattern (where % is a wildcard)
- LIKE pattern%
- LIKE %pattern%

**ORDER BY**
Description: Used to sort the result set in ascending (default) or descending order.

**Syntax:**
SELECT column(s)
FROM table
ORDER BY column(s) ASC|DESC;

**LIMIT**
Description: Used to give the top-n elements of a given category.

**Syntax:**
SELECT column(s)
FROM table
LIMIT n;
CREATE TABLE

**Description:** Used to create a new table.

**Syntax:**

```sql
CREATE TABLE tableName(
    column1 datatype,
    column2 datatype,
    ...
    columnN datatype,
    PRIMARY KEY (one or more columns)
);
```

**Common Column Data Types:**

- `VARCHAR(N)` - strings of up to N characters (e.g., 'Whitaker')
- `INTEGER` - integers (e.g., 10)
- `FLOAT` - floats (e.g., 1.54)
- `DATETIME` - date/time representation (e.g., '2017-05-25 18:20:32')

**Alias for tables names**

**Description:** You can use an alias to give a table a different name. You assign a table an alias by using the `AS` keyword as the following syntax for a partial query:

```sql
table_name AS table_alias
```

**Examples:**

```sql
SELECT g.name, g.platform FROM Games AS g 
WHERE g.name LIKE "%Pokemon%"
```

As a shortcut you can also write this same query without the `AS`

```sql
SELECT g.name, g.platform FROM Games g 
WHERE g.name LIKE "%Pokemon%"
```

**INSERT INTO**

**Description:** Used to insert a new record (row) into an existing table, where the listed values correspond to the listed columns.

**Syntax:**

```sql
INSERT INTO table_name
    (column1, column2, ..., columnN)
VALUES
    (value1, value2, ..., valueN); 
```

**DELETE**

**Description:** Used to remove a record (row) which matches condition(s) from an existing table.

**Syntax:**

```sql
DELETE FROM tableName 
WHERE condition(s); 
```
**UPDATE**

*Description:* Used to modify the existing records in a table.

*Syntax:*

\[
\text{UPDATE table\_name} \\
\text{SET column1 = value1, column2 = value2, ... WHERE condition(s);}
\]

**JOIN**

*Description:* Used to select values from more than one table. Note that you can write multi-table queries either with equivalent WHERE clauses, or using the JOIN keyword.

*Syntax/Examples:*

\[
\text{SELECT col(s)} \\
\text{FROM table1, table2, ...} \\
\text{WHERE table1.a = table2.b} \\
\text{AND table2.c > '42'};
\]

OR

\[
\text{SELECT col(s)} \\
\text{FROM table1} \\
\text{JOIN table2 on table1.a = table2.b} \\
\text{JOIN ...} \\
\text{WHERE table2.c > '42'};
\]